



DEPARTMENT OF INFORMATION TECHNOLOGY



PCT'S
A. P. SHAH INSTITUTE OF TECHNOLOGY
SURVEY NO. 12, GHODBUNDER RD,
KASARVADAVALI, THANE WEST - 400615

BITS & BYTES

2022-23

**EVENTS,
WORKSHOPS & TRAININGS**

**INDUSTRIAL
COLLABORATIONS**

INTERNSHIPS

**MOMENT
OF PRIDE**

ACHIEVEMENTS

**ACADEMIC
INITIATIVES**

**STUDENT
ARTICLES**

**DEPARTMENT OF
INFORMATION
TECHNOLOGY**



APSIT

(NBA ACCREDITED)

Editorial



Prof. Neha Deshmukh
Magazine Editor



Prof. Jayashree Jha
Editor-In-Chief



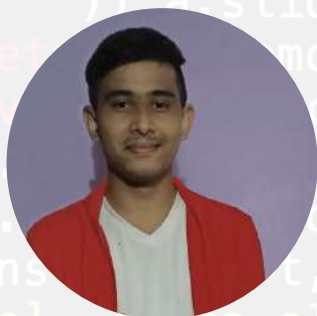
Prof. Apeksha Mohite
Director



Ms. Shweta Mahajan
Magazine Co-Editor



Prof. Sonal Jain
Co-Editor-In-Chief



Anand Morya
Magazine Head



Shubhangi Tripathi
Magazine Co-Head



Kunal Shinde
Content Editor



Janhavi Kullkarni
Associate Editor



Mudra Limbasia
Graphic Designer



Yugandhar Ghatge
Art Director

Principal's Desk



I am delighted to announce the release of our institute's Department of Information Technology magazine, "Bits & Bytes," now in its sixth consecutive year. This publication is dedicated to realizing our primary vision of transforming students into globally competent IT professionals. It serves as an inspiration for both students and faculty to remain ambitious and aim for higher goals. We eagerly anticipate the successful journeys of our young aspiring engineers. The dedicated efforts of the Editorial Board in producing this magazine are highly commendable. I extend my heartfelt congratulations to the students and faculty on their accomplishments and wish them the best in their future endeavors.

- Dr. Uttam D. Kolekar

Principal

HOD's Desk



With immense pleasure and pride, we present the latest edition of our Information Technology Department magazine, "Bits & Bytes." This edition showcases the remarkable accomplishments of our students and faculty during the Academic Year 2022-2023. I am delighted to share how our students have effectively leveraged various academic initiatives, industrial collaborations and internships opportunities to enhance their knowledge. In a resounding display of technical prowess and innovation, our students have earned noteworthy recognition in the IBM Hack Challenge 2022. As we strive to meet our objective of transforming the challenges of this changing world into opportunities for the future, we are equally committed to instilling moral ethics in our students, shaping them into responsible citizens.

The harmonious bond between students and faculty plays a crucial role in our department's collaborative progress and achievement of set goals. I extend my heartfelt congratulations to the entire Editorial Team for their dedication and enthusiasm in compiling this magazine. I also wish them the best of luck in their future endeavors.

- Prof. Kiran Deshpande
HOD,
Department of Information Technology.

INSTITUTE'S VISION

APSIT aspires to be a premier institute producing globally competent engineering professionals to contribute towards socio-economic growth of India.

MISSION

To provide conducive and collaborative environment to meet contemporary & future Engineering challenges by project based and value-added education with the support of trained faculty.

DEPARTMENT'S

VISION

To be a prime center of excellence by transforming students into globally competent IT Professionals.

MISSION

Mission 1: To develop, support and maintain state-of-art infrastructure to serve as a potent resource hub for the IT industries.

Mission 2: To inculcate the problem solving, analytical, logical skills and to promote the culture of creativity and innovation among the students.

Mission 3: To adapt with the transformation of the technology emphasizing on interdisciplinary studies , exposure to emerging technologies and imbibing high standards of professional ethics and social responsibilities in all endeavors

Department PEO

PEO 1 PREPARATION: To make students competent for higher studies and employable, to meet industrial requirements.

PEO2 CORE COMPETENCE: To develop students having core competence in science, mathematics and fundamentals of Information Technology to address everchanging industrial requirements globally.

PEO 3 BREADTH: To create academically conducive environment to learn engineering skills in the domains such as Database, Data Analytics, Application Development and Allied Technologies.

PEO 4 PROFESSIONALISM: To enrich students with professional ethics, leadership qualities, and entrepreneurial skills.

PEO 5 LIFE LONG LEARNING: An ability to engage in lifelong learning for effective adaptation to technological developments.

Department PSO

Program Specific Outcomes

PSO1 To use modern computer languages, environments and platforms in creating innovative carrier paths in the areas of database, data analysis and application development.

PSO2 To apply theoretical foundations of Information technology in developing solutions for engineering problems that meet automation needs of industry and society.

PSO3 To design and implement efficient real-time solutions using evolving knowledge of information technology by demonstrating the practices of professional ethics and the concern for societal and environment well being.



Department Infrastructure

Academic Infrastructure

- Air Conditioned Classrooms and Tutorial Rooms equipped with LCD Projectors and Smartboards.
- Well equipped Air Conditioned Laboratories connected to Centralized Server Room.
- Media Equipped Air Conditioned Seminar hall.
- Online Departmental Library Management System.

Computational Facility

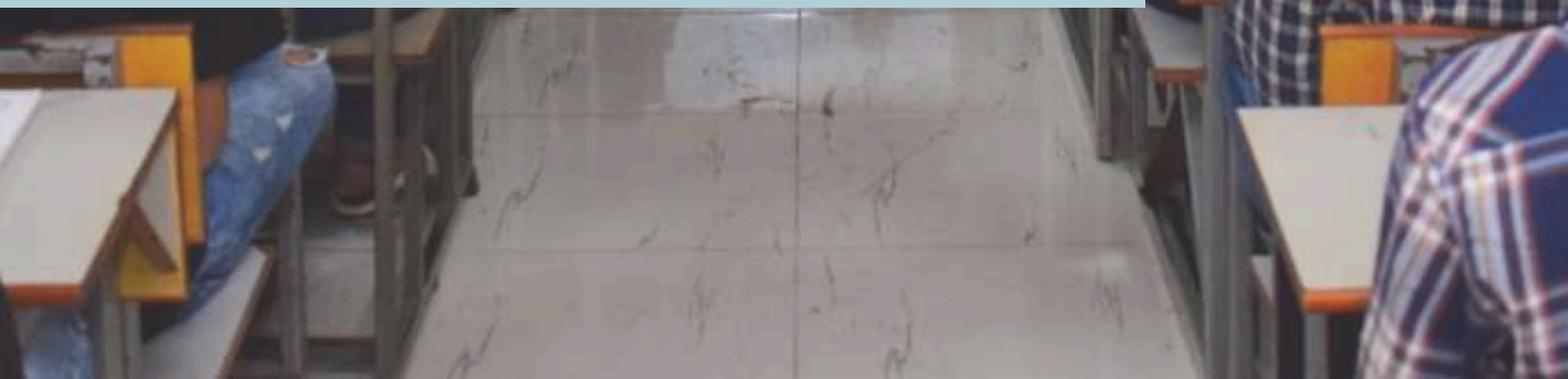
- Number of Computational Nodes available in Department: 300.
- Number of Blade Server Systems: 05
- PC to Student ratio: 1:1.
- Dedicated leased line of Internet.
- Wi-Fi Access & CCTV Surveillance.

Highlights

- Use & accessibility of remote servers during laboratory sessions.
- E-Learning facility with Moodle.
- Online Tests for Self Assessment.
- Virtual Classroom & Web Conferencing facility for Query Sessions.
- Authentication based Internet access and printing facility for students.
- Cloud Storage for Students.
- Online Lab assignments submission & assessment with feedback. (E-assessment).
- Online Academic Feedback facility for Students.
- Lab availability for students after academic hours.
- Expert Talks, Value addition Programs & Project Based Learning.



Academics



Results for A.Y. 2022-2023

ODD Semester

SEIT

NAME	CGPA
BHUTADA SHWETA	9.22
MESTA SUMIT	9.22
PRABHUNERURKAR KAUSHIK	9.22
NALAVADE AKSHATA	8.96
PATEL RIYA	8.96

TEIT

NAME	CGPA
SINGH SURAJ	9.87
SINGH JAYESH	9.87
SACHDEV HITESH	9.57
NAIR ATHUL	9.48
JAIN NISHANK	9.48
GONDHALEKAR ANUSHA	9.48
MORE SARTHAK	9.48

BEIT

NAME	CGPA
SHINDE SAKSHI	9.73
MIRJURKAR ANVIT	9.59
KULKARNI JANHAVI	9.59
GUJAR EKTA	9.32
TODI KUSHAL	9.18

Results for A.Y.2022-2023

EVEN Semester

SEIT

NAME

CGPA

BHAVSAR PRAKRUTI

9.48

BHUTADA SHWETA

9.48

MESTA SUMIT

9.35

ZAGADE SHIVANI

9.22

SHARMA VINAYAK

9.09

TEIT

NAME

CGPA

JAIN NISHANK

9.86

MAHAPATRA SUBHASHISH

9.59

MAHAPATRA DEVANSHU

9.45

SOMVANSHI VINAYAK

9.45

PADYAL CHIRAG

9.45

BHALERAU VAISHNAVI

9.45

BEIT

NAME

CGPA

GUJAR EKTA

9.81

SHINDE SAKSHI

9.63

BHOIR PARTH

9.62

SHANBHAG SNEHAL

9.37

KULKARNI JANHAVI

9.36

MIRJURKAR ANVIT

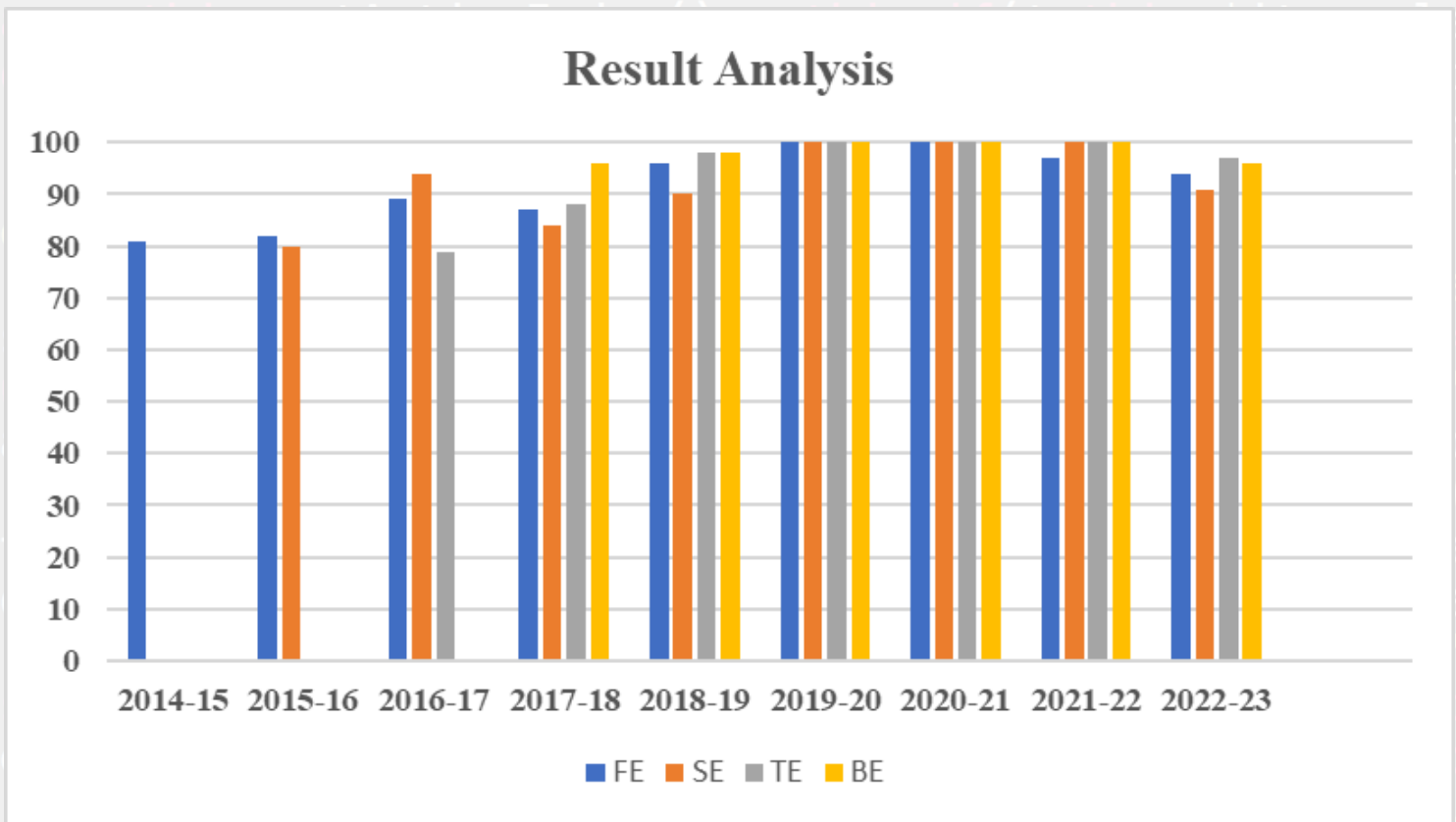
9.35

TELAVANE PUSHKAR

9.35

Result Analysis

As a premium institute we are providing our students with complete ecosystem for their overall development. Along with this we keep on enhancing the teaching learning processes continuously by bringing in latest technology and trends. This all can be realized through excellent performance by our students in university examination.



Testimony

Any department is said to thrive when the faculty and the students produce results that are visible. We honor the academic achievements of students, who have excelled in their endeavors and we are immensely proud of their success.

This has been possible because of smart, innovative teaching methodologies augmented with time intensive planning & efforts put in by Faculties & students.

- Prof. Yaminee Patil, Exam Coordinator.



Student Achievements

Technical

Hackscript 4.0

Team Members:

- Chirag Padyal, Yash Umredkar, Miheer Shrivas, Abhishek Shinde
- Suraj Singh, Atharva Takle, Vinayak Somvansi,
- Pranil Patil

Result

2nd Prize

2nd Prize

Certified Ethical Hacker

Team Members:

- Yash Umredkar
- Atharv Sathe
- Vishnavi Bhalerao

Result

Student Certified

IBM Hack Challenge 2022

- Devanshu Mahapatra
- Subhashish Mahapatra
- Atul Nair
- Nishank Jain

Result

Winner

Technical

Smart India Hackathon (SIH) 2022

Event

- Gulshan Yadav (TE IT)
- Rahulkumar Yadav (TE IT)
- Akshay Bhura (BE IT)
- Vaishnavi Bhalerao (TE IT)
- Sania Mane (TE IT)

Result

Winner

NPTEL

Course

- Database Management System
- Design and Analysis of Algorithms
- Software Project Management

Students Certified

4
8
2

IIT Bombay Spoken Tutorial

Event

- Java
- Drupal
- Latex
- Linux
- Python

Students Certified

71
45
60
85
96

Technical

Research Publications

For implementing research-based learning which can develop critical thinking amongst student, we are motivating our student to present and publish paper in well reputed Scopus indexed journals/conferences.

Team Member	Project Title	Conference Detail
Pratik Dhumal	Integrating Recommendation System to Creative Learning Web Framework	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Kushal Todi		
Ruchita Raut		
Shridhar Joshi	Developing Chatbot Support for Addressing FAQs about Creative Learning	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Akshada Warik		
Harsh Rathod		
Yugandhar Ghatge	Applying Blockchain to build Transparent, Secure and Tracable Supply Chain Management	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Mayuri Patil		
Abhijeet Mishra		
Vatsal Singh	IOT and ML Based Traffic Diversion System for Emergency Services	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Shubhangi Tripathi		
Pushkar Telavane		
Prathmesh Shrirao	Disha: AR based Application for College Campus Navigation	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Sameer Sawant		
Raj Shisode		
Kunal Shetty	ML based recommendation system for CV Analysis	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Omkar Bhoir		
Nilesh Virkar		
Rajvi Shah	Developing Comprehensive Application for Tracking Library Services	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Jay Mahajan		
Atharva Tambde		
Akshay Bura	Designing ML based Comprehensive Web framework for Soft Skills Enhancement	11th International Conference on Emerging Trends in Engineering and Technology- Signal and Information Processing(ICETET-SIP 2023), G H Raisoni College of Engineering , Nagpur, India
Sourav Joshi		
Sakshi Deshpande		
Pavan Chopra	ChargePlug:Comprehensive Cross-platform Application for Locating Electric Charging Stations	IEEE 2023 8th International Conference for Convergence in Technology (I2CT),Pune, Maharashtra, India
Shreya Desai		
Pratham Dhanesha		

Technical

Research Publications

Team Member	Project Title	Conference Detail
Snehal Shanbhag	IOT & ML based Cross Platform Application for Designing Smart Parking	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Pranjali Shimpi		
Akansha Rawat		
Sindura Dasi	Developing Real-time and Secure Attendance Management System using Blockchain & ML	11th International Conference on Emerging Trends in Engineering and Technology- Signal and Information Processing(ICETET-SIP 2023), G H Raisoni College of Engineering , Nagpur, India
Ekta Gujar		
Abdul Ansari		
Ishika Sharma	Agrolife: ML enabled Plant Disease Classification System	2023 IEEE World Conference on Applied Intelligence and Computing (AIC)
Anagha Rai		
Ruta Mhaskar		
Atharv Joshi	Developing Real-time Digitization System using Deep Learning for Handwritten Documents	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Siddhesh Puranik		
Niranjan Ram		
Kiran Suryawanshi	Designing Agricultural Supply Chain tracking System by using Blockchain	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Mayuresh Prabhu		
Tanmay Doshi		
AbhayPratap Singh	Developing ML based Student Sentiment Analysis portal for an Educational Institute	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Aditya Joshi		
Bharat Singh		
Anand Morye	Developing Data Analytics Support for Creative Learning Web Framework	IEEE International Conference on sustainable Computing and Smart Systems(ICSCSS 2023), Hindustan College of Engineering and Technology, Coimbatore, India
Ayush Jain		
Neel Dudheliya		
Bhimraj Parihar	Go-Brainous: An AI based Educational App for Kids	11th International Conference on Emerging Trends in Engineering and Technology- Signal and Information Processing(ICETET-SIP 2023), G H Raisoni College of Engineering , Nagpur, India
Siddharth Chhoriya		

Technical

(Course Completion Statistics through Industrial Collaborations)

Cisco Networking Academy

Course Name

Students Certified

- | | |
|------------------------------------|-----|
| • Programming Essentials in C++ | 63 |
| • Cyber Security Essentials | 100 |
| • IOT:Big Data Analytics | 59 |
| • CCNA: Introduction to Networks | 83 |
| • Networking Essentials | 83 |
| • Linux Essentials | 121 |
| • Programming Essentials in Python | 87 |
| • IOT Fundamentals | 19 |



AWS Academy

Course Name

Students Certified

- | | |
|--|-----|
| • AI - ML VIRTUAL INTERNSHIP PROGRAM | 59 |
| • DATA ANALYTICS VIRTUAL INTERNSHIP | 100 |
| • CLOUD VIRTUAL INTERNSHIP | 33 |
| • AWS : Skill Builder- Cloud practionar
Esseentials | 70 |

Oracle Academy

ORACLE®

ACADEMY

Course Name

Students Certified

- | | |
|------------------------|----|
| • Database Foundations | 59 |
| • Database Design | 50 |
| • Java Foundations | 71 |

Technical

Red hat



Course Name

Students Certified

- | | |
|---|-----|
| • DO101: Introduction to Open Shift | 127 |
| • DO180: Red Hat OpenShift I: Containers & Kubernetes | 124 |

IBM cognitive class

Course Name

Students Certified

- | | |
|---------------------------------------|-----|
| • Docker Essentials | 123 |
| • Build your own chatbot | 72 |
| • Celonis Process Mining Fundamentals | 136 |
| • Data science methodology | 68 |

Hacker Rank

Course Name

Students Certified

- | | |
|--------------------------------|-----|
| • Problem Solving Basic Course | 108 |
|--------------------------------|-----|

Technical

AICTE Virtual Internship Program

Cohort 3 (July 2022 - Sept 2022):

Sr. No.	Domain	Industrial Collaboration	No. of Completion
1	NETWORKING CLOUD VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	39
2	CYBERSECURITY VIRTUAL INTERNSHIP PROGRAM	Palo Alto Networks Cybersecurity Academy	31
3	AWS CLOUD VIRTUAL INTERNSHIP	AWS Academy	24
4	AI - ML VIRTUAL INTERNSHIP PROGRAM	AWS Academy	14
5	DATA ANALYTICS VIRTUAL INTERNSHIP	AWS Academy	53

Technical

AICTE Virtual Internship Program

Cohort 4 (Dec 2022 - Feb 2023):

Sr. No.	Domain	Industrial Collaboration	No. of Completion
1	NETWORKING CLOUD VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	02
2	CYBERSECURITY VIRTUAL INTERNSHIP PROGRAM	Palo Alto Networks Cybersecurity Academy	13
3	ROBOTIC PROCESS AUTOMATION (RPA) VIRTUAL INTERNSHIP PROGRAM	Blue Prism University	03
4	AI - ML VIRTUAL INTERNSHIP PROGRAM	AWS Academy	45
5	DATA ANALYTICS VIRTUAL INTERNSHIP	AWS Academy	47
6	NETWORKING VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	11
7	PROCESS MINING VIRTUAL INTERNSHIP PROGRAM	Celonis Academy	04
8	CLOUD VIRTUAL INTERNSHIP	AWS Academy	09

Technical

AICTE Virtual Internship Program

Cohort 4 (Dec 2022 – Feb 2023):

Sr. No.	Domain	Industrial Collaboration	No. of Completion
1	NETWORKING CLOUD VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	13
2	CYBERSECURITY VIRTUAL INTERNSHIP PROGRAM	Palo Alto Networks Cybersecurity Academy	09
3	CLOUD VIRTUAL INTERNSHIP	AWS Academy	23
4	AI - ML VIRTUAL INTERNSHIP PROGRAM	AWS Academy	30
5	DATA ANALYTICS PROCESS AUTOMATION VIRTUAL INTERNSHIP	AWS Academy	12
6	NETWORKING VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	02
7	PROCESS MINING VIRTUAL INTERNSHIP PROGRAM	Celonis Academy	05
8	ROBOTIC PROCESS AUTOMATION (RPA) VIRTUAL INTERNSHIP PROGRAM	Blue Prism University	04
9	UIPATH ROBOTIC PROCESS AUTOMATION (RPA) DEVELOPER VIRTUAL INTERNSHIP PROGRAM	Blue Prism University	4
10	NETWORK SECURITY ASSOCIATE VIRTUAL INTERNSHIP	Juniper Networks Cloud and Automation Academy	15
11	EMBEDDED SYSTEM DEVELOPER VIRTUAL INTERNSHIP		04
12	DATA ANALYTICS VIRTUAL INTERNSHIP	AWS Academy	20

Sports

Badminton Gold at University Intercollegiate Tournament

Players

Mayur Parab - S.E. - IT

Result

Winner

Dodge Ball (Girls)

Players

Team

Result

Winner

Throwball (Girls)

Players

Team

Result

Winner

Open Cricket (Boys)

Players

Team

Result

Runner-up

Sports

Carrom Single

Players

Mrunal Shardul

Result

Winner

Table Tennis Single

Players

Shweta Bhutda

Result

Runner up

Table Tennis Doubles

Players

Shweta Bhutda
Anagha Rai

Result

Runner up

Chess

Players

Harsh Yedavade

Result

Runner-up

Sports

FootBALL

Players

Team

Result

Runner Up

BOX CRICKET (Girls)

Players

Team

Result

Runner-up

KABADDI (Boys)

Players

Team

Result

Winner

Sports



Sports



Sports





Faculty Achievements



DR. UTTAM D. KOLEKAR

- APSIT, Thane, won the ISTE "Best Engineering Institute (State Level)" award for excellence in education and innovation.
- Principal Dr. Uttam Kolekar was named ISTE "Best Principal (Engineering)" for outstanding leadership
- APSIT Thane Ranks No.1, in Mumbai Region in Times Engineering Survey 2022.
- APSIT, Thane, was recognized as the Best Performing Institute in the West Zone for 2022 under the AICTE Internship Program and ranked among the top 20 institutes nationally for promoting hands-on industry exposure.



Prof. Kiran Deshpande

- Received a Certificate of Appreciation from the AICTE Eduskills Virtual Internship Program 2023 for valuable support and contribution.---22-23
- successfully completed the Blue Prism Academia Program's Foundation Educator Training in Robotic Process Automation.---22-23
- Honored as an Advanced Level Instructor for excellence and contributions to the Cisco Networking Academy.22-23
- Awarded Instructor Years of Service for five years of dedicated service in the Cisco Networking Academy. " 22-23



DR. Sameer Naniwadekar

- Published a book on Internet of Things and its Applications
- Published a book on Cryptography and Network Security
- Published a book on Artificial Intelligence with Forschung Publications



Prof. Neha Deshmukh

Prof. Neha Deshmukh has recently achieved Blockchain Expert certification. This distinguished credential signifies her deep understanding and expertise in blockchain technology, a rapidly evolving and highly influential field.





Prof. Manjusha Kashilkar

Prof. Manjusha Kashilkar has recently achieved certification as an AWS Solution Architect, one of the most prestigious and globally recognized IT certifications.



Prof. Sneha Dalvi

Prof. Sneha Dalvi has recently earned certification as an AWS Solution Architect, a highly prestigious and globally recognized IT credential. This achievement highlights her expertise in cloud computing and underscores her commitment to remaining at the forefront of technological advancements.



Specializations Certification

Sr. No	Name(s) of faculty	Certifications
1	Dr Kiran Deshpande	Educator Blue prism
2	Sneha Dalvi	AWS Solution Architect,Global Certification
3	Manjusha Kashilkar	Google Data Analytics, AWS Solution Architect,Global Certification
4	Neha Deshmukh	Certified Blockchain Expert, Build-A-Thon 2022 in Red Hat OpenShift
5	Manjusha Kashilkar	AWS Solution Architect,Global Certification
6	Sonal Balpande	IBM Hack challenge Mentor, Build-A-Thon 2022 in Data Analytics
7	Apeksha Mohite	Build-A-Thon 2022 in Data Analytics
8	Geetanjali Kalme	Build-A-Thon 2022 in Data Analytics
9	Shweta Mahajan	Build-A-Thon 2022 in AI

Specializations Certification



PARSHVANATH CHARITABLE TRUST'S
A. P. SHAH INSTITUTE OF TECHNOLOGY



Congratulations

A big congratulations to the APSIT faculties for their successful completion of the IBM Build-A-Thon 2022 in diverse futuristic domains such as AI ML, Data Science & Analytics, Cloud App Development, and Cyber Security. Their commitment to staying at the forefront of technology is truly commendable.

 Prof. Neha Deshmukh	 Prof. Ramaya R. B	 Prof. Shraddha Shinde
 Prof. Apeksha Mohite	 Prof. Bharti Khemani	 Prof. Anagha Aher
 Prof. Sonal Balpande	 Prof. Deepali Kayande	 Prof. Poonam Pangarkar
 Prof. Shweta Mahajan	 Prof. Jaya Gupta	 Prof. Rajashree Chaudhari
 Prof. Ashvini Gaikwad	 Prof. Mahesh Pawaskar	 Prof. Vaibhav Yawalkar

 **Smart Internz**

Research Publications

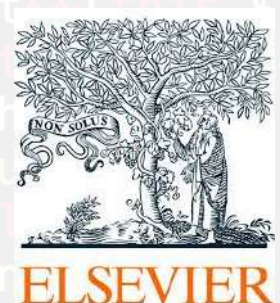
Faculty Name	Paper Title	Name of Conference
Mrs. Sonal Jain Mrs. Charul Singh	IoT and ML based Cross-Platform Application for Designing Smart Parking	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023)
Mrs. Anagha N. Aher Mrs. Jayshree Jha	Developing Chat Server for Addressing FAQs about Creative learning	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mrs. Roshna V. Sangle	Go-Brainious : An AI based Educational App for Kids	IEEE Xplore - 11th International Conference on Emerging Trends in Engineering Technology - Signal and Information Processing (ICETET - SIP)
Mrs. Yaminee Patil	Real-time Attendance Monitoring System using Machine Learning and Blockchain	IEEE Xplore - 11th International Conference on Emerging Trends in Engineering Technology - Signal and Information Processing (ICETET - SIP)
Dr. Uttam Kolekar Mrs. Yaminee Patil	ML based Recommendation System for CV Analysis	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Dr. Kiran Deshpande Mrs. Manasi Choche	ChargePlug- A Comprehensive Cross-Platform Application for Locating Electric Charging Stations	IEEE Xplore - International Conference for Convergence in Technology (I2CT 2023)
Mrs. Rajashri Chaudhari	Developing ML based Student Sentiment Analysis portal for Educational Institute	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mrs. Jayshree Jha Mrs. Sonal Balpande	Developing Real-time Digitization System using Deep Learning for Handwritten Documents	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mrs. Neha P. Deshmukh	Applying Blockchain to transparent, secure and traceable Supply Chain Management	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mrs. Rujata Chaudhari Dr. Kiran Deshpande	ML Based Comprehensive Application to Enhance Soft Skills	IEEE Xplore - 11th International Conference on Emerging Trends in Engineering and Technology - Signal and Information Processing (ICETET-SIP-23)

Research Publications

Faculty Name	Paper Title	Name of Conference
Mrs. Sonal Balpande Dr. Kiran Deshpande	Exploring the Effectiveness of CNN and SVM Algorithms for Assessing Fruit Freshnes	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mr. Ganesh Gourshete Mrs. Sonal Balpande Mrs. Geetanjali Kalme	Indian Sign Language Recognition and Translation: Text to sign Language using Deep learning Technique	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mr. Mandar Ganjapurkar Ms. Apurva Chaudhari	IoT Enabled Traffic Diversion System for Medical Emergency Services	International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mrs. Geetanjali Kalme Mrs. Sonal Balpande	Developing Recommendation System for Creative Learning Web Framework	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mr. Mandar ganjapurkar Mrs. Shweta Mahajan	A.R. app for college campus Navigation	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023)
Mrs. Poonam Pangarkar Dr. Kiran Deshpande Mrs. Jayshree Jha	Developing data analytics support for creative learning web frame work	IEEE Xplore - International Conference on Sustainable Computing and Smart System (ICSCSS 2023)
Mrs. Shita Agrawal Mrs. Anagha Aher	Developing Comprehensive Application for Tracking Library Services	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023)
Mrs. Manjusha Kashilkar Mrs. Sonal Balpande	Designing Agricultural Supplychain tracking system by using blockchain	AIP (Scopus Indexed) - International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023)
Dr. Sameer S. Nanivadekar Ms. Sonal Jain Ms. Charul Singh	Agrolife: Machine Learning Based Plant Disease Classification System	IEEE Xplore - 2023 IEEE World Conference on Applied Intelligence and Computing (AIC)
Dr.Kiran Deshpande Mrs. Neha Deshmukh	A 3D storyline using Unity game engine	IEEE Xplore - 2022 2nd International Conference on Intelligent Technologies (CONIT)

Research Publications

Faculty Name	Paper Title	Name of Conference
Mrs. Neha P. Deshmukh	Blockchain based web framework for real estate transactions	Springer - Proceedings of Fifth ICCNCT 2022
Mrs. Neha P. Deshmukh	AR/VR-Based Comprehensive Framework for Virtual Convocation	Springer - Proceedings of ICT4SD 2022
Mrs. Neha P. Deshmukh	Handwriting recognition and conversion using neural networks	Springer - Proceedings of ICT4SD 2022
Mrs. Apeksha T. Mohite and Mrs. Geetanjali R. Kalme	Developing Smart ML Based Recommendation System	Springer - Proceedings of IEMIS 2022, Volume 2
Mrs. Apeksha T. Mohite	RC-sized Autonomous vehicle with Prediction Model	IEEE Xplore - 2022 IEEE 7th International conference for Convergence in Technology
Mrs. Yaminee M. Patil and Mrs. Sonal Jain	Surakhsha Kavach : ML based Cross Platform Application for Covid-19 Vulnerability Detection	Springer - Proceedings of ICTIS 2022, Volume 1



Faculty Development Program

Faculty member are motivated to enrol in various FDPs to facilitate up-gradation of their knowledge and skill.

Faculty Name	Course Name
Mrs. Neha P. Deshmukh	Blockchain and DLT
Mrs. Yaminee Patil	Blockchain and DLT
Mr. Ganesh D Gourshete	Introduction to Internet of Things
Mrs. Geetanjali Kalme	Agumented and Virtual Reality
Mr. Ganesh Gourshete	Introduction to Internet of Things
Mrs. Sonal Jain	Python 3.4.3
Mrs. Shweta Mahajan	Python 3.4.3
Ms. Charul Singh	Python 3.4.3
Mrs. Jayshree Jha	Python 3.4.3
Mrs. Jayshree Jha	Artificial Intelligence Towards Data Science Applications
Mrs. Roshana Sangle	Secure Application Development
Mrs. Sonal Balpande	Python 3.4.3
Mr. Mandar Ganjapurkar	Python 3.4.3



Short Term Training Program

Faculty member are motivated to enrol in various STTPs to facilitate up-gradation of their knowledge and skill.

Faculty Name	Course Name
Mrs. Jayshree Jha	Building Solutions Using No code AI and Machine Learning
Mrs. Manasi Choche	Building Solutions Using No code AI and Machine Learning
Ms. Charul Singh	Building Solutions Using No code AI and Machine Learning
Mrs. Shital Agarwal	Building Solutions Using No code AI and Machine Learning
Mrs. Roshna Sangle	Building Solutions Using No code AI and Machine Learning
Mrs. Yaminee Patil	Building Solutions Using No code AI and Machine Learning
Mrs. Geetanjali Kalme	Building Solutions Using No Code AI and Machine Learning
Mrs. Apeksha Mohite	Building Solutions Using No code AI and Machine Learning
Mrs. Manjusha Kashilkar	Building Solutions Using No code AI and Machine Learning
Mrs. Sonal Balpande	Building Solutions Using No code AI and Machine Learning
Mrs. Rujata Chaudhari	Building Solutions Using No code AI and Machine Learning
Mrs. Neha Deshmukh	Building Solutions Using No code AI and Machine Learning
Mrs. Sonal Jain	Building Solutions Using No Code AI and Machine Learning
Mrs. Shweta Mahajan	Building Solutions Using No Code AI and Machine Learning
Mrs. Neha Deshmukh	Blockchain and DLT
Mrs. Manasi Choche	Artificial Intelligence Towards Data Science Applications
Mrs. Sonal Balpande	Artificial Intelligence Towards Data Science Applications
Mrs. Neha P. Deshmukh	Artificial Intelligence Towards Data Science Applications
Mrs. Manjusha Kashilkar	Artificial Intelligence Towards Data Science Applications

STTP's & Trainings Conducted by Faculty Member A. Y. 2022-23



Essentials of Linux Server Administration and Networking

Training Conducted By:

**Prof. Neha Deshmukh, Prof. Sonal Jain,
Prof. Sonia Aneesh, Prof. Manasi Choche,
Prof. Geetanjali Kalme and Prof. Archana Kotangle**



Developing Web Applications using REACT JS

Training Conducted By:

Prof. Yaminee Patil



**MOMENT
OF PRIDE**

**We are proud to be
NBA accredited**



A. P. Shah Institute of Technology

Remarkable Achievement

In our relentless pursuit to evolve and upgrade, we are dedicated to providing our students with an environment that fosters growth and excellence in emerging technologies. This unwavering commitment stands as our core motto, driving every initiative and endeavor we undertake. To actualize this vision, our faculty members are continuously enhancing their skills, staying abreast of the latest advancements and pedagogical strategies.

The enthusiastic, focused, and highly qualified faculty of APSIT are the cornerstone of our success. Their dedication and passion for teaching have consistently brought laurels to our institute, elevating our standards of excellence. Through their tireless efforts, they inspire students to reach new heights, ensuring that APSIT remains at the forefront of educational innovation and technological advancement.

Our faculty's ongoing professional development not only enriches their own knowledge but also translates into a superior learning experience for our students. By staying current with industry trends and integrating cutting-edge technology into the curriculum, they prepare our students to meet the challenges of a dynamic and ever-evolving technological landscape.

As we continue to strive for excellence, we celebrate the achievements of our faculty and their crucial role in shaping the future of our students. Their commitment to continuous improvement and educational excellence ensures that APSIT remains a beacon of knowledge and innovation, nurturing the next generation of tech leaders.



Showcasing Commitment to Cybersecurity Excellence

Yash Umredkar, Atharv Sathe, Vaishnavi Bhalerao- BEIT

The journey to becoming a Certified Ethical Hacker is challenging and demands a deep understanding of cybersecurity principles, a keen eye for detail, and relentless determination. Atharv, Yash, and Vaishnavi's accomplishment is a shining example of what can be achieved through perseverance and a passion for cybersecurity. Their success story is an inspiration to their peers and a source of pride for the entire APSIT community.





Celebrating Success: APSIT Thane Excels in IBM Hack Challenge 2022

Subhashish Mahapatra, Athul Nair, Nishank Jain and
Devanshu Mahapatra- BEIT

In a resounding display of technical prowess and innovation, the student teams and Prof. Sonal Balpande have earned noteworthy recognition in the IBM Hack Challenge 2022. The achievement is a testament to the dedication, hard work, and mentorship that have become synonymous with APSIT's commitment to excellence.

Six teams from the Department of Information Technology at APSIT participated in the IBM Hack Challenge 2022, an event that serves as a valuable platform for technical learning, problem-solving, and addressing societal issues. What makes this achievement even more impressive is that two out of the six teams secured a coveted spot among the top 25 participants.

The acknowledgement of APSIT, Thane, as the top-performing institute based on the performance of its student teams underscores the institution's commitment to nurturing talent and fostering an environment conducive to technical growth. This recognition positions APSIT as a hub for innovative thinking and technical expertise.

Special congratulations are due to Prof. Sonal Balpande, whose guidance and mentorship played a pivotal role in the success of the student teams. Her expertise and unwavering support has been instrumental in shaping the students into accomplished participants in the hack challenge. Prof. Balpande's dedication to the students' development and commitment to their learning journey is truly commendable.

The success of APSIT Thane in the IBM Hack Challenge 2022 is not just a triumph for the institution but also a commendation for the student teams who poured their hard work and efforts into the competition. Their active participation and contributions in devising solutions for real-world challenges exemplify the kind of forward-thinking and innovation that APSIT instills in its students.

Participation in events like the IBM Hack Challenge goes beyond a mere competition; it is a transformative experience that equips students with practical skills, knowledge, and valuable insights. The lessons learnt and the experience gained through this challenge will undoubtedly serve as a strong foundation for the future endeavors of the participating students.

In conclusion, this accomplishment stands as a source of pride for APSIT Thane, Prof. Sonal Balpande, and the entire Department of Information Technology. It not only highlights their commitment to excellence but also showcases their ability to produce talented individuals who can make a positive impact on society. The success in the IBM Hack Challenge 2022 is a beacon of achievement for APSIT and a testament to its unwavering dedication to shaping the future leaders of the tech industry.







Outstanding Achievement

The Department of Information Technology at A. P. Shah Institute of Technology, Thane (APSIT), is elated to extend hearty congratulations to the winners of the EXALT 2K3 University Level Project Exhibition competition. The department takes immense pride in announcing the outstanding achievements of two remarkable teams.

The first team, composed of BE students Parth Bohir, Pranav Mayekar, and Anjali Singh, secured the prestigious position of runner-ups in the BE Projects category. Their exemplary work and innovative approach were acknowledged, showcasing their dedication to academic excellence.

In the Mini Project category, the second team, comprising TE students Subhashish Mahapatra, Devanshu Mahapatra, Nishank Jain, and Athul Nair, clinched the first prize. Their project stood out for its creativity, technical prowess, and effective execution, bringing honor to both the department and APSIT Thane.

These accomplishments highlight the commitment of APSIT Thane's Department of Information Technology to nurturing a culture of innovation and excellence. The students' success in the EXALT 2K3 competition is a testament to their hard work, ingenuity, and dedication to pushing the boundaries of their academic pursuits.

Both teams were mentored by the Department Project Coordinator, Prof. Sonal Jain, whose guidance played a pivotal role in shaping these outstanding projects. Prof. Jain's commitment to fostering a conducive learning environment has undoubtedly contributed to the success of these talented students.

As these accomplished teams bask in the glory of their achievements, APSIT Thane wishes them all the best for their future endeavors. The recognition they've received not only brings honor to the department but also serves as an inspiration for the entire APSIT community. The commitment to excellence displayed by these students reflects the institute's ongoing dedication to producing capable, innovative, and successful professionals. Once again, congratulations to the winners, and may their journey of success continue to unfold in the most remarkable ways.





Shine Bright at Cisco Netacad Riders 2023

A. P. Shah Institute of Technology, Thane (APSIT), is proud to extend its warmest congratulations to two outstanding students, Suraj Singh and Subhashish Mahapatra, for achieving the silver certificate at the prestigious Cisco Netacad Riders 2023 International competition. Under the mentorship of Prof. Neha Deshmukh, a CCNA certified Accredited Instructor, their remarkable accomplishment has brought great pride to APSIT Thane.

The Cisco Netacad Riders 2023 International competition is known for attracting the best and brightest students from around the world. Achieving a silver certificate in this challenging competition is a testament to the hard work, dedication, and exceptional talent exhibited by Suraj Singh and Subhashish Mahapatra. This accomplishment also reflects the high-quality teaching and training at APSIT Thane.

The success of our students is not only a cause for celebration within the institute but also a profound reflection of APSIT's unwavering commitment to excellence in education. By providing students with the necessary tools, resources, and support, APSIT Thane aims to empower them to reach their full potential and make a meaningful impact in their respective fields.

APSIT Thane wishes Suraj Singh and Subhashish Mahapatra continued success in all their future endeavors. The institute acknowledges and expresses gratitude to Trustee Mam Mrs. Pooja Shah, Principal Dr. Uttam Kolekar, and Vice Principal Prof. Atul Deshpande for their continuous support, motivation, and appreciation. Their guidance plays a pivotal role in nurturing a conducive environment for students to excel and achieve milestones on both national and international platforms.

The silver certificate at the Cisco Netacad Riders 2023 International competition not only highlights the individual brilliance of Suraj Singh and Subhashish Mahapatra but also reinforces APSIT Thane's commitment to fostering excellence and preparing students for global challenges. Congratulations to the students and the entire APSIT community for this exceptional achievement. May this success be a stepping stone to even greater accomplishments in the future.





Shine at Smart India Hackathon 2022

In a proud moment for A.P. Shah Institute of Technology (APSIT) Thane, a dynamic team secured its place in the Smart India Hackathon (SIH) 2022, a prestigious event showcasing the brightest minds in the country. The team was all set to represent APSIT at the national level in Durgapur, West Bengal.

The announcement was met with enthusiasm and pride. The Principal and Vice Principal engaged in a technical discussion with the talented team members, highlighting this achievement as a testament to the technical prowess and innovative spirit fostered at APSIT.

The APSIT team comprised six exceptional members, each bringing a unique set of skills and perspectives:

Gulshan Yadav (TE IT)
Rahulkumar Yadav (TE IT)
Akshay Bhura (BE IT)
Vaishnavi Bhalerao (TE IT)
Sania Mane (TE IT)

Under the mentorship of Prof. Charul Singh, Assistant Professor in the IT department, the team geared up for the challenges and opportunities that SIH 2022 presented.

The Smart India Hackathon is a platform that encourages innovation and problem-solving among the youth. It brings together the brightest minds to collaborate and devise innovative solutions to real-world challenges. APSIT's participation in this national event reflected its commitment to nurturing creativity, technical acumen, and a problem-solving mindset among its students.

The event marked a significant milestone for APSIT Thane, showcasing the institute's dedication to fostering an environment where students can thrive and excel in their technical endeavors. The entire APSIT community celebrated this achievement, recognizing it as a symbol of the institute's ongoing commitment to academic and professional excellence.



**Team Represented APSIT @ Smart India
Hackathon 2022**





Gold at University Intercollegiate Tournament

The echoes of victory resounded through the courts as A. P. Shah Institute of Technology (APSIT) Thane clinched the gold medal at the University Intercollegiate Badminton Tournament held at KM Agarwal College, Kalyan. The APSIT Badminton Boys Team showcased exceptional skill, sportsmanship, and teamwork, emerging as the champions of the competition.

The triumphant team comprises three outstanding players, each contributing their prowess to the success:

Mayur Parab - S.E. - IT

The journey to victory was marked by fierce competition, strategic plays, and unwavering determination. The APSIT Badminton Boys exhibited not only their athletic abilities but also the values of discipline, dedication, and camaraderie instilled within them by the institute.

The achievement is a testament to the commitment of the players and the supportive environment fostered at APSIT. As the gold medals gleam around their necks, the Badminton Boys Team stands as a shining example of the institute's emphasis on holistic development.





A Pinnacle of Excellence in AICTE Internship Program

In a resounding recognition of its commitment to fostering experiential learning and industry collaboration, A. P. Shah Institute of Technology (APSIT), Thane, has achieved a remarkable feat. APSIT has been not only top-ranked but also honored as the Best Performing Institute in the West Zone for the year 2022 in the prestigious AICTE Internship Program.

This significant accomplishment places APSIT among the top 20 performing institutes at the national level, a testament to its dedication to providing students with hands-on industry exposure and practical skills. The accolade is a reflection of the combined efforts of the management, instructors, and proactive participation of APSIT students in the AICTE Internship Program.

The AICTE Internship Program plays a pivotal role in bridging the gap between academia and industry by providing students with real-world experiences and insights into the professional landscape. APSIT's success in this program is a result of the institute's holistic approach to education, emphasizing not just theoretical knowledge but also practical application and industry relevance.

The achievement underscores the importance of collaborative efforts between APSIT and various industrial partners. The instructors at APSIT, along with the management, have played a crucial role in facilitating meaningful collaborations that contribute to the students' overall learning experience.

APSIT expresses its sincere gratitude to EduSkills Foundation for their extended support throughout this journey. The foundation's commitment to education and skill development has been instrumental in enhancing the impact of the AICTE Internship Program at APSIT.

As APSIT basks in the glory of being recognized as the Best Performing Institute in the West Zone and among the top performers at the national level, it stands as a beacon of excellence in technical education. This achievement reinforces APSIT's commitment to nurturing future-ready professionals and preparing students for the dynamic demands of the industry.

The accolade is not just a recognition of past accomplishments but a motivator for APSIT to continue its pursuit of excellence, innovation, and industry relevance in education. Congratulations to APSIT on this prestigious achievement, and here's to many more milestones in the journey of shaping bright futures!



Cohort 3 (July 2022 – Sept 2022):

Sr. No.	Domain	Industrial Collaboration	No. of Completion
1	NETWORKING CLOUD VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	39
2	CYBERSECURITY VIRTUAL INTERNSHIP PROGRAM	Palo Alto Networks Cybersecurity Academy	31
3	AWS CLOUD VIRTUAL INTERNSHIP	AWS Academy	24
4	AI- ML VIRTUAL INTERNSHIP PROGRAM	AWS Academy	14
5	DATA ANALYTICS VIRTUAL INTERNSHIP	AWS Academy	53

Cohort 4 (Dec 2022 – Feb 2023):

Sr. No.	Domain	Industrial Collaboration	No. of Completion
1	NETWORKING CLOUD VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	02
2	CYBERSECURITY VIRTUAL INTERNSHIP PROGRAM	Palo Alto Networks Cybersecurity Academy	13
3	ROBOTIC PROCESS AUTOMATION (RPA) VIRTUAL INTERNSHIP PROGRAM	Blue Prism University	03
4	AI- ML VIRTUAL INTERNSHIP PROGRAM	AWS Academy	45
5	DATA ANALYTICS VIRTUAL INTERNSHIP	AWS Academy	47
6	NETWORKING VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	11
7	PROCESS MINING VIRTUAL INTERNSHIP PROGRAM	Celonis Academy	04
8	CLOUD VIRTUAL INTERNSHIP	AWS Academy	09

Cohort 4 (Dec 2022 - Feb 2023):

Sr. No.	Domain	Industrial Collaboration	No. of Completion
1	NETWORKING CLOUD VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	13
2	CYBERSECURITY VIRTUAL INTERNSHIP PROGRAM	Palo Alto Networks Cybersecurity Academy	09
3	CLOUD VIRTUAL INTERNSHIP	AWS Academy	23
4	AI - ML VIRTUAL INTERNSHIP PROGRAM	AWS Academy	30
5	DATA ANALYTICS PROCESS AUTOMATION VIRTUAL INTERNSHIP	AWS Academy	12
6	NETWORKING VIRTUAL INTERNSHIP PROGRAM	Juniper Networks Cloud and Automation Academy	02
7	PROCESS MINING VIRTUAL INTERNSHIP PROGRAM	Celonis Academy	05
8	ROBOTIC PROCESS AUTOMATION (RPA) VIRTUAL INTERNSHIP PROGRAM	Blue Prism University	04
9	UIPATH ROBOTIC PROCESS AUTOMATION (RPA) DEVELOPER VIRTUAL INTERNSHIP PROGRAM	Blue Prism University	4
10	NETWORK SECURITY ASSOCIATE VIRTUAL INTERNSHIP	Juniper Networks Cloud and Automation Academy	15
11	EMBEDDED SYSTEM DEVELOPER VIRTUAL INTERNSHIP		04
12	DATA ANALYTICS VIRTUAL INTERNSHIP	AWS Academy	20

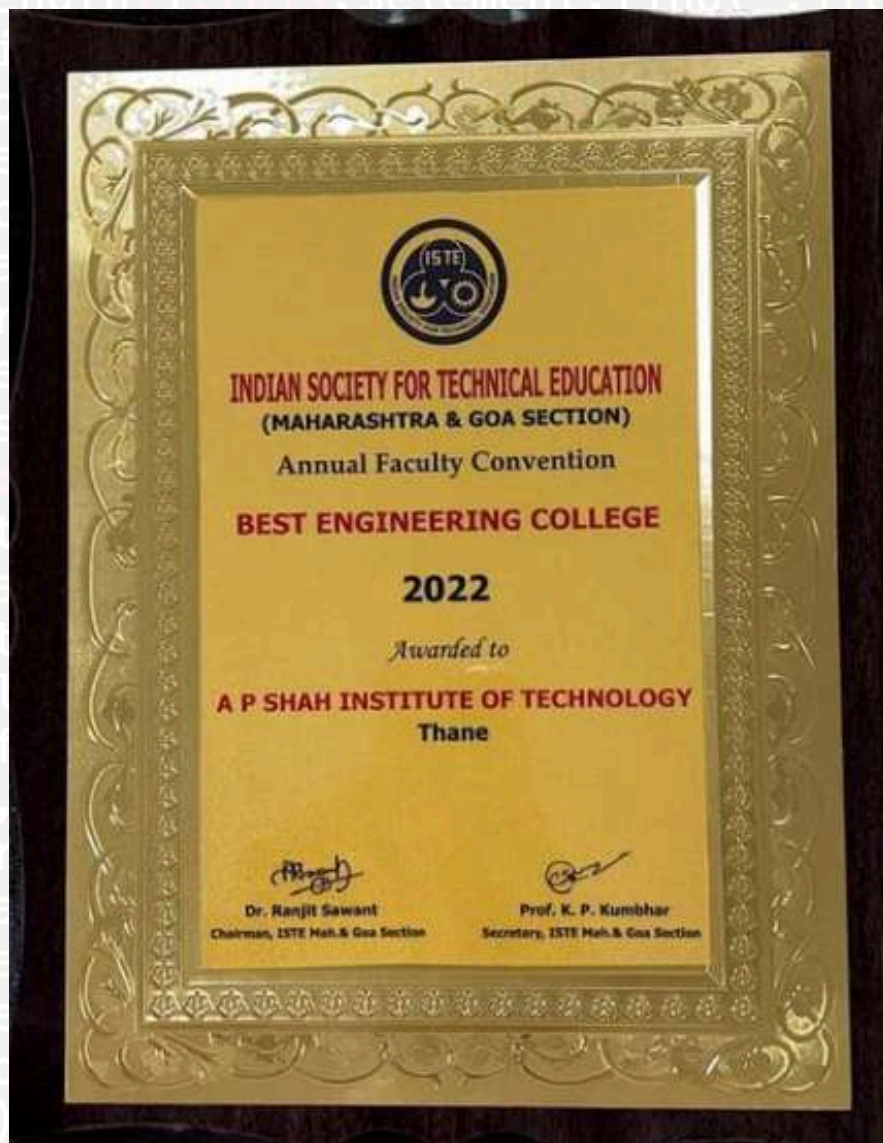


Excellence Recognized by ISTE

In a resounding celebration of academic prowess and leadership, A. P. Shah Institute of Technology (APSIT), Thane, has achieved a distinctive honor by being awarded the "Best Engineering Institute (State Level)" by the esteemed Indian Society for Technical Education (ISTE). Adding to the glory, the institute's dynamic leader, Principal Dr. Uttam Kolekar, has been conferred with the title of "Best Principal (Engineering)" at the state level, recognizing his exceptional leadership and contributions to the field of technical education.

The ISTE, known as the leading national professional society for technical education in India, has a mission to foster career development for teachers, nurture the personality development of students, and contribute to the overall advancement of the technical education system. The recognition bestowed upon APSIT is a testament to the institute's unwavering commitment to these principles.

The award for the "Best Engineering Institute (State Level)" is a reflection of APSIT's consistent efforts in delivering high-quality education, promoting innovative teaching methodologies, and providing a conducive learning environment for its students. The institute has continually





Best Paper Award at ICETET SIP-23

The Department of Information Technology is elated to announce the remarkable achievement by our student team at the 11th International Conference on Emerging Trends in Engineering & Technology-Signal and Information Processing (ICETET SIP-23). The team secured the prestigious Best Paper Award in the Machine Learning Track for their research paper titled "ML Based Comprehensive Application to Enhance Soft Skills."

The winning team, composed of Akshay B., Sourav Joshi, and Sakshi Deshpande, showcased exceptional dedication, hard work, and research skills in developing a paper that stood out in the competitive Machine Learning Track. Under the guidance of Prof. Rujata Chaudhari, their efforts have been recognized by esteemed experts and research scholars, attesting to the quality and relevance of their work.

This success not only brings pride to the individual students but also reflects positively on APSIT's ongoing efforts to instill a research culture among its students. The Best Paper Award is a testament to the commitment of APSIT Thane in nurturing an environment where students are encouraged to explore, innovate, and contribute to the advancement of engineering and technology.

APSIT Thane commends the students for pushing the boundaries of knowledge and making a meaningful contribution to their field. This recognition serves as a stepping stone for even greater achievements in their academic and professional journeys. As these young minds continue to excel, APSIT Thane hopes that the ecosystem created for research and consultancy at the institute will empower students to challenge conventions and strive for excellence.

The entire BE Project Group, along with their guide Prof. Rujata Chaudhari, deserves heartfelt congratulations on this well-deserved accolade. The dedication and passion exhibited by the students have made the institute proud. APSIT Thane extends its best wishes to the student team for continued success in all their future endeavors, confident that they will continue to shine in their chosen paths and contribute significantly to the world of research and technology.





Shine at IEEE Conference with Best Paper Award

Congratulations to our outstanding student team—Suraj Singh, Atharva Takle, and Himanshu Rane—on their remarkable achievement.

The trio has won the Best Paper Award for their research paper titled "Exploring the Effectiveness of CNN and SVM Algorithms for Assessing Fruit Freshness" at the prestigious IEEE International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023).

This remarkable accomplishment is a testament to the dedication, hard work, and exceptional research skills of our students. We are incredibly proud of their achievement and grateful for the guidance provided by Prof. Sonal Balpande.



Team Participated in IBM Hack Challenge 2022 & Received Best Performing Institute Award

In a resounding display of technical prowess and innovation, the student teams and Professor Sonal Balpande have earned noteworthy recognition in the IBM Hack Challenge 2022. The achievement is a testament to the dedication, hard work, and mentorship that have become synonymous with APSIT's commitment to excellence.

Six teams from the Department of Information Technology at APSIT participated in the IBM Hack Challenge 2022, an event that serves as a valuable platform for technical learning, problem-solving, and addressing societal issues. What makes this achievement even more impressive is that two out of the six teams secured a coveted spot among the top 25 participants.

The acknowledgment of APSIT, Thane, as the top-performing institute based on the performance of its student teams underscores the institution's commitment to nurturing talent and fostering an environment conducive to technical growth. This recognition positions APSIT as a hub for innovative thinking and technical expertise.

Special congratulations are due to Professor Sonal Balpande, whose guidance and mentorship played a pivotal role in the success of the student teams. Her expertise and unwavering support have been instrumental in shaping the students into accomplished participants in the hack challenge.

The success of APSIT Thane in the IBM Hack Challenge 2022 is not just a triumph for the institution but also a commendation for the student teams who poured their hard work and efforts into the competition. Their active participation and contributions in devising solutions for real-world challenges exemplify the kind of forward-thinking and innovation that APSIT instills in its students.

Participation in events like the IBM Hack Challenge goes beyond a mere competition; it is a transformative experience that equips students with practical skills, knowledge, and valuable insights. The lessons learned and the experience gained through this challenge will undoubtedly serve as a strong foundation for the future endeavors of the participating students.

In conclusion, this accomplishment stands as a source of pride for APSIT Thane, Professor Sonal Balpande, and the entire Department of Information Technology. It not only highlights their commitment to excellence but also showcases their ability to produce talented individuals who can make a positive impact on society. The success in the IBM Hack Challenge 2022 is a beacon of achievement for APSIT and a testament to its unwavering dedication to shaping the future leaders of the tech industry. Congratulations to all involved!





APSIT Thane Triumphs at IC3SEA 2023

Congratulations to our outstanding student team—Pranjali Shimpi, Snehal Shanbhag, and Akansha Rawat—for their stellar achievement! 🏆

The trio has clinched the Best Paper Award for their research paper titled "IoT and ML based Cross-Platform Application for Designing Smart Parking" at the IEEE International Conference on Contemporary Challenges in Science and its Engineering Applications (IC3SEA 2023). This accomplishment is a testament to their dedication, hard work, and exceptional research skills.

Under the expert guidance of Prof. Sona Jain and Charul Singh, the student team navigated the complexities of their research with precision and innovation. Their efforts were recognized and honored by esteemed experts and research scholars, reflecting the high caliber and relevance of their work.



Research Publications in Conferences

Our department has provided us with a research culture embedded within academics where we were encouraged to publish our research work on major projects. The journey started with the orientation regarding IT domains such as AI & ML, IOT, networking, application development etc. Hands-On training on Latex and GitHub were conducted to enable us with current tools and technologies required for collaborative project management. Various webinars and expert talks were also arranged to inculcate the basic skills of writing effective research papers. In addition to that list of Scopus indexed conferences and journals has been shared by guides to identify and target the conferences. Department has also provided financial support for presenting papers in reputed national and international conferences such as IEEE, Springer etc.



Faculty Testimony

"Our department has provided us with a research culture embedded within academics where students are encouraged to publish their research work on major projects. Students have published their papers in reputed conferences like IEEE, Springer etc. under the guidance of skilled faculty members and also got reimbursement of all the expenses for the same."

Prof. Vishal Badgujar - Project Coordinator

Research Publications

Team Member	Project Title	Conference Detail
Pratik Dhumal	Integrating Recommendation System to Creative Learning Web Framework	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering, Coimbatore, India
Kushal Todi		
Ruchita Raut		
Shridhar Joshi	Developing Chatbot Support for Addressing FAQs about Creative Learning	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering, Coimbatore, India
Akshada Warik		
Harsh Rathod		
Yugandhar Ghatge	Applying Blockchain to build Transparent, Secure and Tracable Supply Chain Management	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering, Coimbatore, India
Mayuri Patil		
Abhijeet Mishra		
Vatsal Singh	IOT and ML Based Traffic Diversion System for Emergency Services	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering, Coimbatore, India
Shubhangi Tripathi		
Pushkar Telavane		
Prathmesh Shrirao	Disha: AR based Application for College Campus Navigation	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering, Coimbatore, India
Sameer Sawant		
Raj Shisode		
Kunal Shetty	ML based recommendation system for CV Analysis	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering, Coimbatore, India
Omkar Bhoir		
Nilesh Virkar		
Rajvi Shah	Developing Comprehensive Application for Tracking Library Services	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering, Coimbatore, India
Jay Mahajan		
Atharva Tambde		
Akshay Bura	Designing ML based Comprehensive Web framework for Soft Skills Enhancement	11th International Conference on Emerging Trends in Engineering and Technology- Signal and Information Processing(ICETET-SIP 2023), G H Raisoni College of Engineering, Nagpur, India
Sourav Joshi		
Sakshi Deshpande		
Pavan Chopra	ChargePlug:Comprehensive Cross-platform Application for Locating Electric Charging Stations	"IEEE 2023 8th International Conference for Convergence in Technology (I2CT),Pune, Maharashtra, India
Shreya Desai		
Pratham Dhanesha		

Research Publications

Team Member	Project Title	Conference Detail
Snehal Shanbhag	IOT & ML based Cross Platform Application for Designing Smart Parking	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Pranjali Shimpi		
Akansha Rawat		
Sindura Dasi	Developing Real-time and Secure Attendance Management System using Blockchain & ML	11th International Conference on Emerging Trends in Engineering and Technology- Signal and Information Processing(ICETET-SIP 2023), G H Raisoni College of Engineering , Nagpur, India
Ekta Gujar		
Abdul Ansari		
Ishika Sharma	Agrolife: ML enabled Plant Disease Classification System	2023 IEEE World Conference on Applied Intelligence and Computing (AIC)
Anagha Rai		
Ruta Mhaskar		
Atharv Joshi	Developing Real-time Digitization System using Deep Learning for Handwritten Documents	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Siddhesh Puranik		
Niranjan Ram		
Kiran Suryawanshi	Designing Agricultural Supply Chain tracking System by using Blockchain	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Mayuresh Prabhu		
Tanmay Doshi		
AbhayPratap Singh	Developing ML based Student Sentiment Analysis portal for an Educational Institute	International Conference on Contemporary Challenges in Science and its Engineering Applications(IC3SEA 2023), Study World College of Engineering , Coimbatore , India
Aditya Joshi		
Bharat Singh		
Anand Morye	Developing Data Analytics Support for Creative Learning Web Framework	IEEE International Conference on sustainable Computing and Smart Systems(ICSCSS 2023), Hindustan College of Engineering and Technology, Coimbatore, India
Ayush Jain		
Neel Dudheliya		
Bhimraj Parihar	Go-Brainous: An AI based Educational App for Kids	11th International Conference on Emerging Trends in Engineering and Technology- Signal and Information Processing(ICETET-SIP 2023), G H Raisoni College of Engineering , Nagpur, India
Siddharth Chhoriya		



INTERNSHIP

SKILLS

OPPORTUNITY

GOAL

MENTOR

EXPERIENCE

TRAINING

DEVELOPMENT

PRACTICE

INTERNSHIPS

Internship Details

A.Y. 2022-23

Neel Dudheliya

- **WeeTech solutions private ltd.**
6th June 2022 - 31st July 2022

Praniv Warungshe

Acme Grade
7th Oct 2022 - 7th Dec 2022

Atharva Sathe

Siemens Ltd
20th Dec 2022 - 19 January 2023

Internship Details

A.Y. 2022-23

Muskan Rao

Grasim Industries Ltd.

12th Dec 2022 - 13th Jan 2023

Akash Patil

Smartlab Innovators

28th November 2022 - 22nd Feb 2023

Internship Details of A.Y. 2022-23



NixonBit

91Springboard A-130
Sector 62, Noida, Uttar Pradesh

Date: [10/01/2023]

TO WHOMSOEVER IT MAY CONCERN,

This is to certify that Rahul kumar Yadav has done his internship as a **Full Stack Developer** at **NixonBit** ("The Company"), Noida, from **30thth May 2022** to **30th November 2022**.

He has worked on a project titled **BeAlive**. This project was aimed at Social Media. As part of the project, he has done a great job.

During his internship he has demonstrated his skills with self-motivation to learn new skills. His performance exceeded our expectations and he was able to complete the tasks on time.

We wish him all the best for his upcoming career.

NixonBit

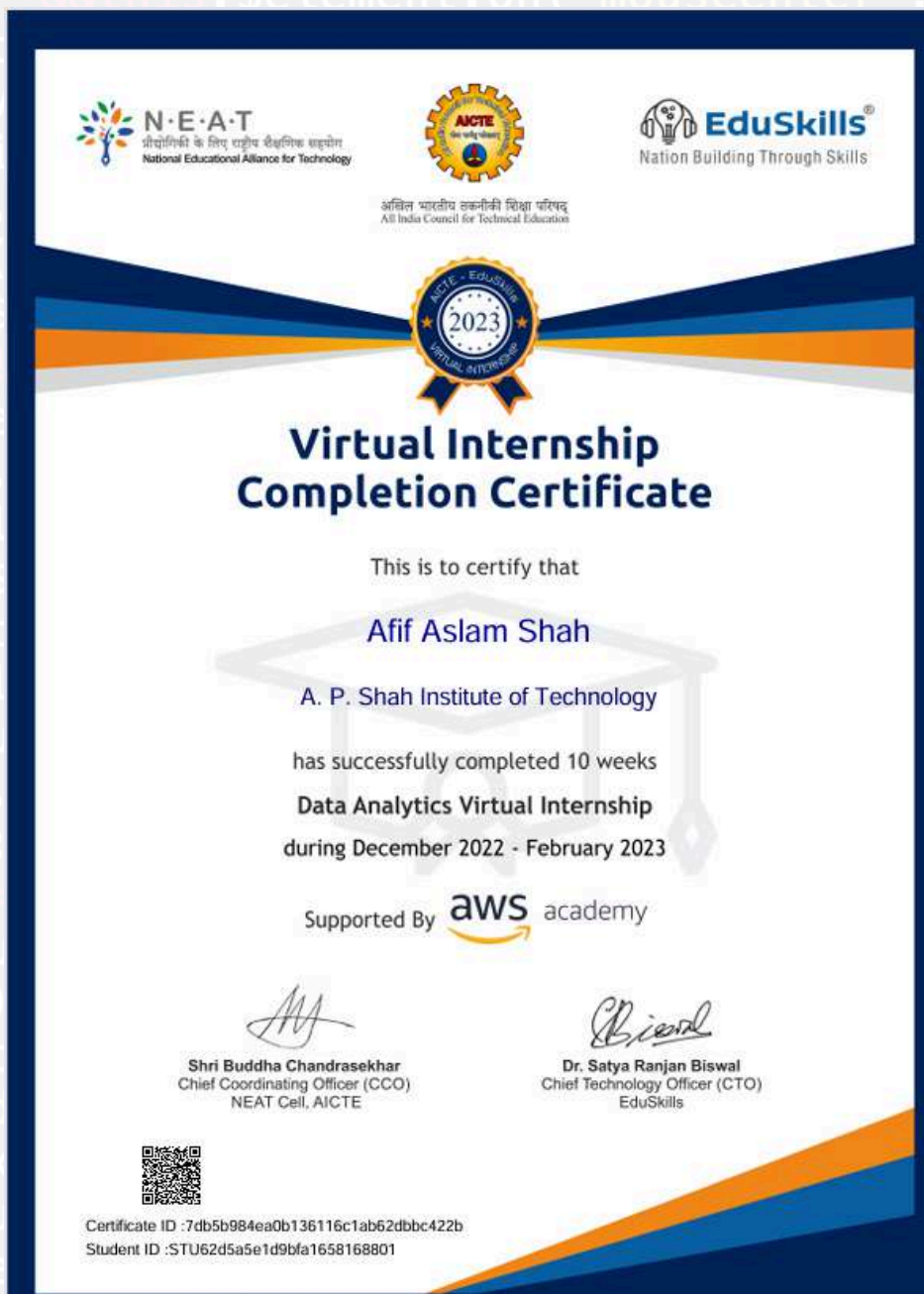
Vishal

CEO Nixonbit

AICTE Virtual Internship Program Completion Statistics

Domain Name	Completions	Academy	Instructor
AI-ML And Data Analytics	299	AWS 	Prof. Yaminee Patil Prof. Sonal Jain
Cybersecurity	53	Palo Alto 	Prof. Manjusha Kashilkar
NETWORKING VIRTUAL INTERNSHIP PROGRAM	82	Juniper Networks Cloud and Automation Academy 	Prof. Geetanjali Kalme
ROBOTIC PROCESS AUTOMATION (RPA) VIRTUAL INTERNSHIP PROGRAM	11	Blue Prism University 	Prof. Ganesh Goursete

AICTE Virtual Internship Program





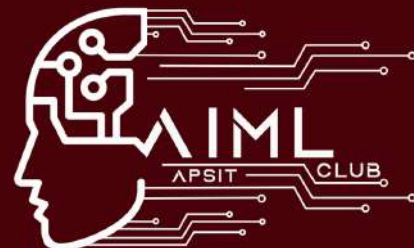
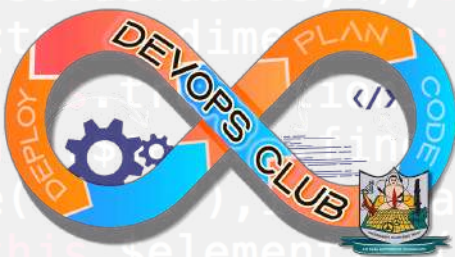
INDUSTRIAL COLLABORATIONS

OPEN SOURCE EXPERIMENTAL LAB



DATA
SCIENCE
WIZARDS®

APSIT has collaborated with Data Science Wizards by developing Open Source Experimental Lab in campus for enabling students in harnessing the power of Data, employing Artificial Intelligence & Machine Learning.

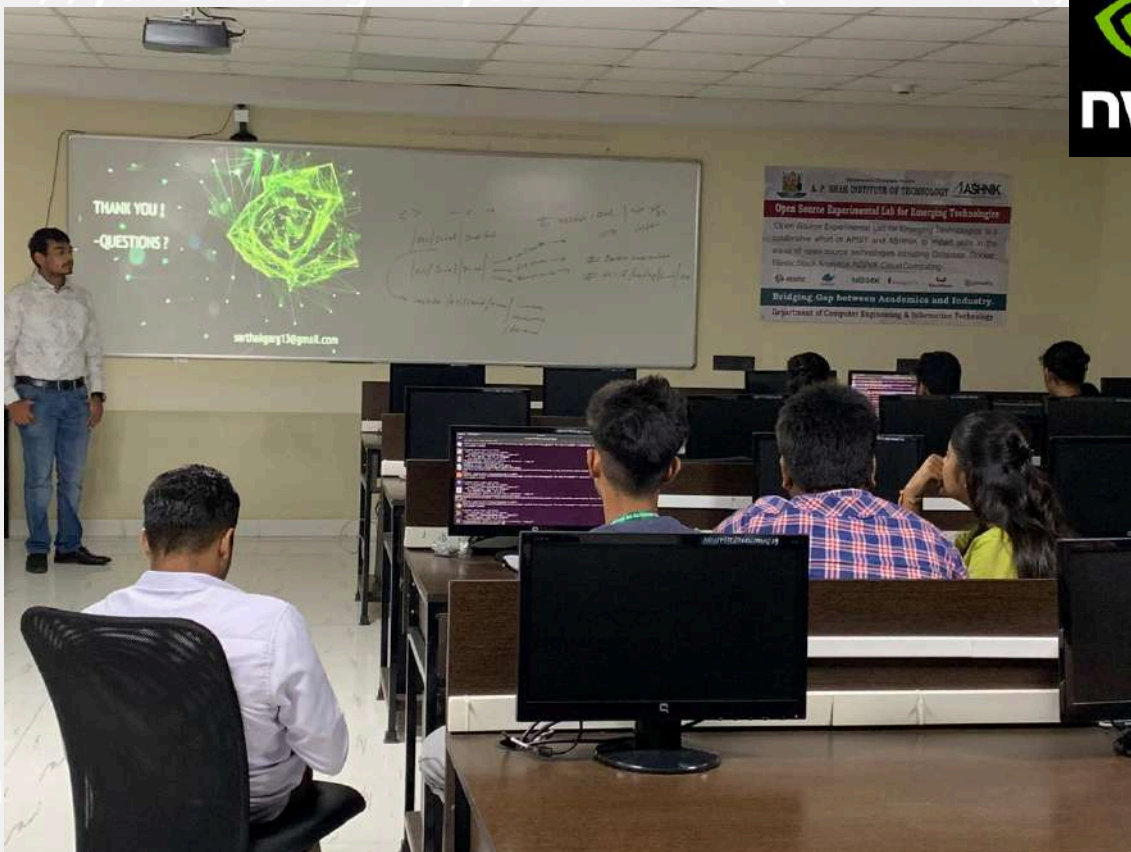


NVIDIA DEEP LEARNING LAB

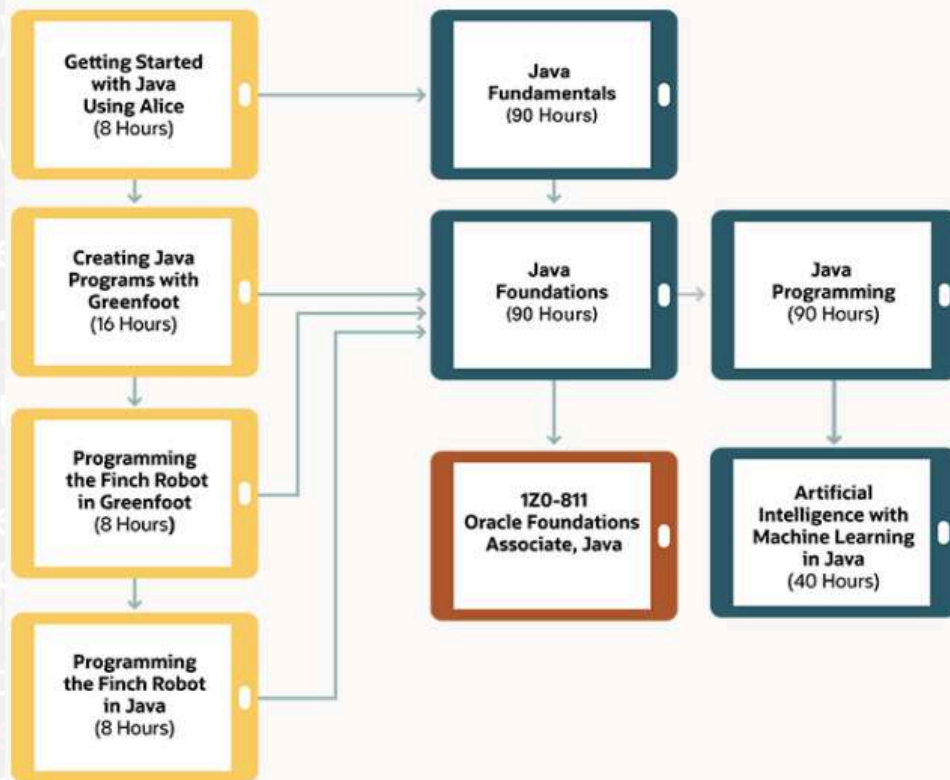


NVIDIA DGX workstation

NVIDIA has setup fully optimized AI Software - Deep Learning GPU Training System (DIGITS) including, NVIDIA driver, NVIDIA® CUDA® Toolkit, NVIDIA® DIGITSTM SW, NVIDIA® cuDNN™, Caffe, Theano, Torch, BDMach, NVIDIA RAPIDS for end-to-end data science and analytics pipelines and NVIDIA DGX Server in APSIT.



ORACLE ACADEMY



ORACLE
Academy

Oracle Academy is a collaborative effort of APSIT & Oracle Corporation, USA to impart skills leading to global certifications in the domains like JAVA Programming, Database Design & Programming & PL/SQL

ORACLE
Academy

AWARD of FINAL EXAM COMPLETION

Database Foundations

PRESENTED TO

User 645583257

FOR SATISFACTORY COMPLETION OF COURSE FINAL EXAM

31st October 2022

William McCabe
William McCabe
Vice President, Oracle Academy

Course Name	Students Certified
• Database Foundations	59
• Database Design	50
• Java Foundations	71

BLUE PRISM ACADEMY ALLIANCE

Blue Prism Academic Alliance @APSIT, aims to provide platform where students can start their career and RPA knowledge with coursework through a global network of colleges, universities, as well as through online certification opportunities, hands-on labs, and other Blue Prism learning resources.



Prof. Vishal Badgujar and Prof. Ganesh Gourshete have completed Foundation and Advance Educator training through Blue Prism Academic Alliance and became Accredited Instructors.

REDHAT ACADEMY



Red Academy is a collaborative effort of APSIT & Red Hat, Inc USA to impart the skills leading to global certifications in the areas of Core System Administration, Middleware Development & Microservices.

Why Red Hat Academy?

Red Hat Academy turns academic institutions into centres for enterprise-ready talent by outfitting them with Red Hat training and certification. Red Hat Academy provides a curriculum to help education institutions keep pace with the demands of industry. The curriculum involves hands-on instruction across platform, middleware, and cloud technologies built with input from Red Hat development, support, and field consulting teams. Rather than learning theoretical skills, students learn practical skills based on use cases from thousands of enterprise implementations.

Course name	Course Completion Statistics
DO101(Introduction to openshift applications)	127
DO180(Red hat openshift I: Containers & Kubernetes)	124

CISCO NETWORKING ACADEMY



CISCO Networking Academy has been set up in collaboration with Cisco Inc. USA. Courses lead to global certifications in the areas of Cybersecurity, IOT, Routing & Switching.



Corporate
Social
Responsibility

Cisco Networking Academy

Certificate of Course Completion

Cybersecurity Essentials

For completing the Cisco Networking Academy® Cybersecurity Essentials course, and demonstrating the following abilities:

- Describe the tactics, techniques and procedures used by cyber criminals.
- Describe the principles of confidentiality, integrity, and availability as they relate to data states and cybersecurity countermeasures.
- Describe technologies, products and procedures used to protect confidentiality, ensure integrity and provide high availability.

- Explain how cybersecurity professionals use technologies, processes and procedures to defend all components of the network.
- Explain the purpose of laws related to cybersecurity.

Aagya Singh
 Student

A.P. Shah Institute of Technology
 Academy Name

India
 Location

6 Aug 2022
 Date

Prof. Kiran Deshpande
 Instructor

Instructor Signature

Course name

Course Completion Statistics

• Programming Essentials in C++	63
• Cyber Security Essentials	100
• IOT:Big Data Analytics	59
• CCNA: Introduction to Networks	83
• Networking Essentials	83
• Linux Essentials	121
• Programming Essentials in Python	87
• IOT Fundamentals	19



Networking
Academy

AWS ACADEMY



Amazon Web Services & Educate program prepares students for booming technology of Cloud Computing. AWS certification is a doorway to IT industry. AWS Academy Cloud computing curricula prepares students for industry-recognized certificates and in-demand cloud jobs.

AICTE Virtual Internship Completion Statistics through AWS Academy

Sr. No.	Domain	Industrial Collaboration	No. of Completion
1	AI - ML VIRTUAL INTERNSHIP PROGRAM	AWS Academy	59
2	DATA ANALYTICS VIRTUAL INTERNSHIP	AWS Academy	100
3	CLOUD VIRTUAL INTERNSHIP	AWS Academy	33
4	AWS : Skill Builder- Cloud practionar Esesntials	AWS Academy	70



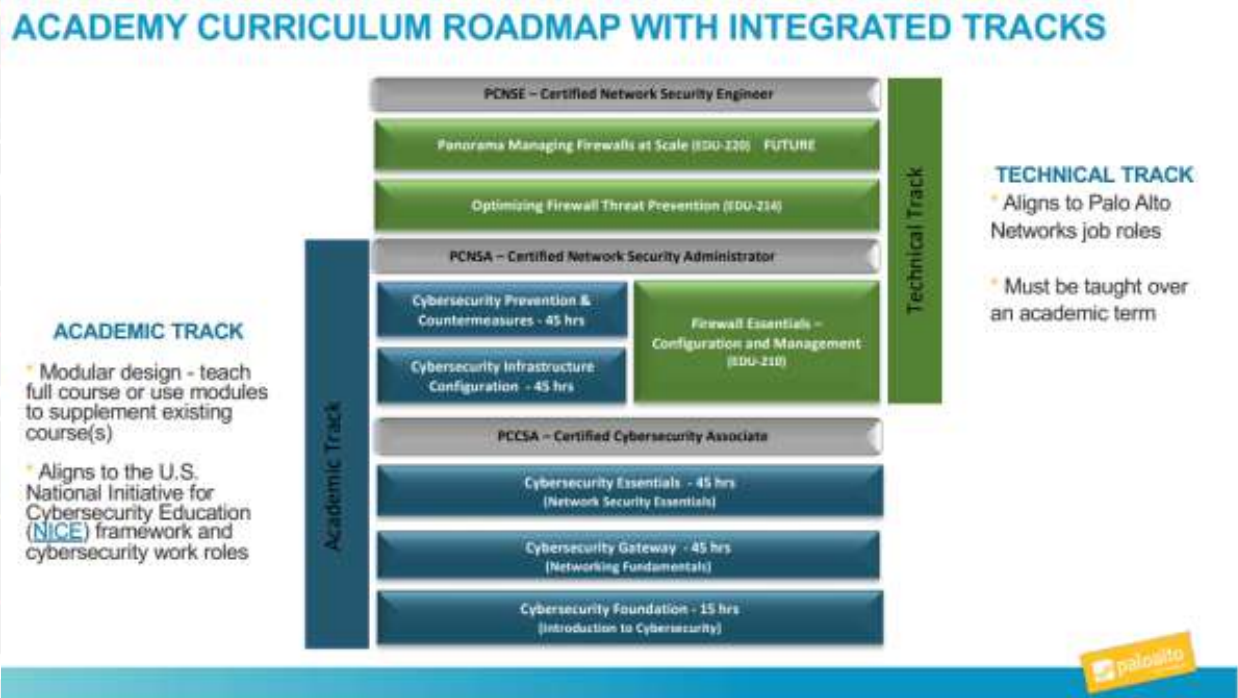
JUNIPER NETWORKS® CLOUD AND AUTOMATION ACADEMY

Juniper Networks® Cloud and Automation Academy @ APSIT aims to provide the opportunity for developing knowledge that reflects networking industry trends, with a focus on cloud solutions and network automation.

Through Juniper Networks® Cloud and Automation Academy 100+ courses are completed related to academic subject



PALO ALTO NETWORKS CYBERSECURITY ACADEMY



Become Palo Alto Networks Certified Cybersecurity Associate (PCCSA) possessing knowledge of cutting-edge technology available today to manage the cyber threats of tomorrow. Academy curriculum is aligned with the U.S. National Initiative for Cyber Security Education

Course name

Course Completion Statistics

• Cybersecurity Foundation	8
• Network Security	8
• Cloud Security	8
• Security Operations Fundamentals	8
• Cybersecurity Virtual Internship Program (I Half of A.Y. 21-22)	34
• CYBERSECURITY VIRTUAL INTERNSHIP PROGRAM (II Half of A.Y. 21-22)	69

PALO ALTO NETWORKS CYBERSECURITY ACADEMY



VIRTUSA ACADEMIC ALLIANCE

Virtusa Academic Alliance enhances learning experience in Full Stack Development which aims to hone, engage and incubate talent to bridge the Academia-Industry requirements. This COE also helps our students to be industry ready while still being at the campus with the benefit of industry certifications paving their way to success

virtusa

CERTIFICATE OF

Participation

PRESENTED TO

Yaminee Patil

from **A P Shah Institute of Technology** for participating in
the Train the trainer program on Full Stack Engineering held
during June and July 2022



Murali Padmanabhan

Senior Vice President (Level I)

virtusa



virtusa
Technology Orientation
for Faculty



virtusa
Graduate Talent
Program



AI & ML, DEVOPS STUDENTS CLUBS

AI & ML, DevOps students' clubs were recently inaugurated at APSIT, Thane, marking a significant step for collaborative learning among APSITians. The chief guests of the event were Mr. Sandeep Khuperkar (CEO, CO-Founder Data Science Wizards) and Mr. Pritesh Tiwari (Founder, Chief Data Scientist Data Science Wizards). APSITians were guided by both about the current industry adoption of AI & ML and DevOps, as well as the available career opportunities and platforms for collaborative learning activities in both of these domains. The leadership of these clubs will be undertaken by the core team of faculties and students under the guidance of industry experts and alumni, with the motive of enabling students and the community at large.





ACADEMIC INITIATIVES

Massive Open Online Courses (MOOCs)

At the forefront of educational innovation, APSIT is embracing Massive Open Online Courses (MOOCs) to enrich learning experiences and empower both faculty and students. By integrating various MOOC platforms into their curriculum, APSIT is not only delivering content but also adding substantial value to its educational offerings.

APSIT recognizes the transformative potential of MOOCs in expanding access to high-quality education. Faculty members leverage platforms like NPTEL, Spoken Tutorial, Coursera, edX, Udacity, and FutureLearn to supplement traditional lectures with cutting-edge content from global experts and institutions. This integration allows APSIT to offer a diverse range of courses across disciplines.

Student Testimony

Massive Open Online Courses (MOOC) is essentially an asynchronous platform and process for teaching through pre-recorded lectures, resource video materials, lecture notes, assignments and quizzes, which are usually online and provide self-assessment at regular intervals during learning. The enrollment and learning from these courses involves no cost. Following these online courses, an in-person, proctored certification exam will be conducted and a certificate is provided through the participating institutions and industry, when applicable. This has helped a lot in taking the subject knowledge to a next level.

-By Sanjana Nalawade, TE-IT

NPTEL Achievements of A.Y. 2022-23



The National Programme on Technology Enhanced Learning (NPTEL) stands as a beacon of educational innovation, spearheaded by seven prestigious Indian Institutes of Technology (IIT Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras, and Roorkee) along with the Indian Institute of Science. This initiative aims to revolutionize engineering education by offering meticulously designed courses crafted by IIT faculty, accessible to students and faculty across the country.

At APSIT, NPTEL has been embraced wholeheartedly, with the institute recognized as an ACTIVE Local Chapter for both sessions of the academic year 2021-22. This acknowledgment highlights APSIT's commitment to integrating high-quality educational resources into its curriculum, enriching the learning experience for students and faculty alike.

Through NPTEL, students and faculty at APSIT gain access to a diverse array of courses covering various domains of engineering. These courses are not just educational but also practical, offering insights and expertise directly from esteemed IITians. Upon successful completion, participants receive certifications that validate their knowledge and skills, enhancing their academic credentials and employability.

APSIT further demonstrates its dedication to promoting learning by reimbursing the full NPTEL Certification Exam fees for faculties and students who successfully complete their certifications. This initiative not only incentivizes participation but also recognizes and rewards the efforts of individuals committed to continuous learning and professional development.

Student Achievements 2022-23

Data Base Management System

Student Name

Manjiri Gole

Shweta Bhutada

Karan Rajkumar Jain

Sakshi Jagtap

Outcomes

Successfully completed

Successfully completed

Successfully completed

Successfully completed

Software Project Management

Student Name

Subhashish Mahapatra

Nishank Jain

Outcomes

Elite

Elite

Design and analysis of algorithms

Student Name

Praniv Prabhu Warungshe

Adarsh Pandey

Yash Prakash Jain

Sumit Ganesh Mesta

Sankalp Sanjay Gunjal

VINAYAK DHANANJAY SHARMA

Joshi Urvi Ajay Nayana

Yukti Kailash Ogare

Outcomes

Successfully completed

Successfully completed

Successfully completed

Successfully completed

Successfully completed

Successfully completed

Successfully completed

Successfully completed

The Joy of Computing using Python

Student Name

Karan Rajkumar Jain
Joshi Urvi Ajay Nayana

Outcomes

Elite
Elite+Silver

Introduction To Internet Of Things

Student Name

Ganesh D Gourshete

Outcomes

Elite

NPTEL Achievements

NPTEL Statistics I half of A.Y. 2022-23

Name	Course Name	Certificate Type
Manjiri Gole	Data Base Management System	Successfully completed
Shweta Bhutada	Data Base Management System	Successfully completed
Karan Rajkumar Jain	Data Base Management System	Successfully completed
Sakshi Jagtap	Data Base Management System	Successfully completed
Subhashish Mahapatra	Software Project Management	Elite
Nishank Jain	Software Project Management	Elite
Praniv Prabhu Warungshe	Design and analysis of algorithms	Successfully completed
Adarsh Pandey	Design and analysis of algorithms	Successfully completed
Yash Prakash Jain	Design and analysis of algorithms	Successfully completed
Sumit Ganesh Mesta	Design and analysis of algorithms	Successfully completed
Sankalp Sanjay Gunjal	Design and analysis of algorithms	Successfully completed
VINAYAK DHANANJAY SHARMA	Design and analysis of algorithms	Successfully completed
Joshi Urvi Ajay Nayana	Design and analysis of algorithms	Successfully completed
Yukti Kailash Ogare	Design and analysis of algorithms	Successfully completed

NPTEL Statistics II half of A.Y. 2022-23

Name	Course Name	Certificate Type
Karan Rajkumar Jain	The Joy of Computing using Python	Elite
Joshi Urvi Ajay Nayana	The Joy of Computing using Python	Elite+Silver
Ganesh D Gourshete	Introduction To Internet Of Things	Elite

Spoken Tutorial



A.P. Shah Institute of Technology (APSIT) takes pride in being recognized as a Super Resource Center by IIT Bombay for the Spoken Tutorial program under the Ministry of Human Resource Development (MHRD), Government of India. This prestigious designation underscores APSIT's commitment to enhancing the skills and capabilities of its students across all branches of engineering through comprehensive training and certification in open-source programming languages, tools, and technologies.

Upon successful completion of the Spoken Tutorial program, students receive certifications recognized by MHRD, validating their proficiency in specific programming languages and tools. These certifications not only bolster academic credentials but also enhance employability, as they are highly regarded by industry professionals seeking skilled engineers adept in open-source technologies.

Academic Year	Course	Completion Statistic
2022-23	Java	71
2022-23	Drupal	45
2022-23	Latex	60
2022-23	Linux	85
2022-23	Python	96

Spoken Tutorial

Java



Toppers

1. TANAYA KULKARNI	65.00%
2. MUSKAN SINGH	65.00%
3. SEJAL OTAVKAR	65.00%
4. BHARAT SHARMA	65.00%
5. SHWETA BHUTADA	62.50%

No. of students completed Certifications: 71

Spoken Tutorial

Python



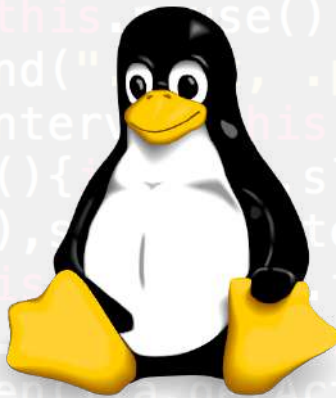
Toppers

1. EDWIN GEORGÉ	95.00%
2. RONIT NAIK	90.00%
3. ASHWINI NIPURTE	90.00%
4. RAJ NIKAM	88.60%

No. of students completed Certifications: 96

Spoken Tutorial

Linux



Toppers

1. KAUSHIK PRABHU NERURKAR	83.30%
2. ANKITA SEMWAL	80.00%
3. ABHITI KANNAPOGU	76.70%
4. AMOGH PARULEKAR	76.70%

No. of students completed Certifications: 85

Spoken Tutorial

LaTeX

LATEX

Toppers:

1. VEDANT PATIL	88.90%
2. SAKSHI SHINDE	88.30%
3. NILESH DHONDIBA VIRKAR	88.30%

No. of students completed Certifications: 60

Spoken Tutorial

Drupal



Toppers

1. MAHAPATRA DEVANSHU	65.00%
2. BALEKAR SAKSHI	62.50%
3. VIRAMGAMA MAYANK	60.00%

No. of students completed Certifications: 45

GATE TRAINING

Free GATE Coaching



A. P. Shah Institute of Technology (APSIT), Thane, organized a GATE Awareness Session on September 19, 2022, in collaboration with experts from VisionGATE. The session aimed to enlighten students about the myriad opportunities available after pursuing the Graduate Aptitude Test in Engineering (GATE). Mr. Rajesh Singh Vats from VisionGATE was the key speaker, providing APSITians with insights into the mindset, focus, and efforts required to excel in the GATE examination.

During the awareness session, APSIT announced the initiation of GATE coaching within the campus in collaboration with VisionGATE. This coaching program, offered free of cost, is available to all APSIT students who express interest in GATE preparation. The initiative is designed to support students in their GATE journey and enhance their chances of success.

To inspire and motivate current students, the session included the success story of Tanmay Sule, an APSIT Thane alumni who achieved an impressive All India Rank II in the GATE 2020 examination. Other successful alumni were also highlighted, emphasizing the institute's commitment to nurturing talent and facilitating success in GATE examinations. The GATE Awareness Session provided valuable insights and resources for students contemplating GATE preparation and showcased the potential for academic and professional growth through this competitive examination.

GRE TRAINING

Free GRE Coaching



A. P. Shah Institute of Technology, Thane - APSIT (APSIT, Thane) conducted GRE awareness session on 9 February 2023 through experts of Carrier First to make students aware about opportunities available after GRE, Admission Process, Financial Requirements & Roadmap for preparation. Mr. Amey Phadke from Carrier First conveyed APSITians about the mindset, focus & efforts required to outperform in GRE & IELTS. Institute in collaboration with Carrier First has started GRE coaching in campus itself for all APSIT students free of cost who have shown their inclination towards GRE preparation. Current students were also made aware about success stories of Alumni who have completed Higher Studies abroad through GRE & IELTS.

APTITUDE TRAINING

Training Program



In an ever-evolving job market, the Department of Information Technology has taken a proactive approach to ensure its students are well-prepared for their future careers. Recognizing the importance of a comprehensive skill set, the department organized a six-day pre-placement training program aimed at equipping students with the essential skills and knowledge needed to excel in their job search and succeed in their professional lives.

The training was meticulously designed to cover various critical aspects, including technical skills, soft skills, industry awareness, and interview preparation. This all-encompassing approach ensured that students from the second year, third year, and final year were well-prepared to face the challenges of the recruitment process.

Student Testimony

"Aptitude coaching conducted in the college showcases the student-centered nature of APSIT. The Aptitude training sessions have put the students in a better position to face the campus recruitment drives while the Gate coaching has enabled them to polish their knowledge of subjects and widen their conceptual understanding."

-By Shubhangi Tripathi, BE-IT

APTITUDE TRAINING

Training Program

An impressive number of students attended the training, highlighting the program's significance and the students' eagerness to enhance their employability. The primary objectives of the pre-placement training were to prepare students for the recruitment process, provide them with insights into industry trends and expectations, and help them build confidence.

A standout feature of the program was the emphasis on regular assessment and feedback. Every weekend, students were exposed to technical and coding tests, allowing them to gauge their performance and identify core areas for improvement. This continuous evaluation process was instrumental in helping students stay focused and work diligently towards enhancing their technical prowess.

Moreover, the training included mock interviews, providing students with a realistic experience of corporate interviews. This practical exposure was invaluable as it helped students familiarize themselves with the interview environment, manage their nerves, and refine their responses. Trainers provided detailed feedback after each mock interview, enabling students to understand their strengths and weaknesses and work on specific areas to improve their interview skills.

By offering such a well-rounded training program, the Department of Information Technology has demonstrated its commitment to the holistic development of its students. The initiative not only prepares students for immediate recruitment opportunities but also instills a sense of confidence and readiness for their future careers.

The success of this program is a testament to the department's dedication to student success and its proactive approach to bridging the gap between academic knowledge and industry expectations. As students continue to engage with these training opportunities, they are sure to emerge as well-rounded professionals ready to make their mark in the tech industry.

ARS

Student Empowerment Scheme

Attendance Reward Scheme

In Academic Year 2022.23 , APSIT has announced 'Attendance Reward Scheme' for students. All APSIT students having more than 90% theory attendance of every semester are eligible for the attendance reward. The reward scheme is implemented in both semesters of an academic year. Usually it will be in the month of September and March every academic year. The students qualified for reward were given coupons worth Rs. 1000 which can be used in the college canteen and stationery store .

19 Students have taken benefit of ARS in First Half of AY 2022-23.

Student Testimony

As an encouragement to attend lectures and lab sessions regularly, APSIT has announced 'Attendance Reward Scheme' for students. All APSIT students having more than 90% attendance of every semester are eligible for the attendance reward. The reward scheme is implemented in both semesters of an academic year. Usually it will be in the month of September and March every academic year. The students qualified for reward are given coupons worth Rs. 1000 which can be used in the college canteen and stationery store. This reward encourages students for attending lectures and lab Sessions.

By-Urvi Joshi, SE-IT

ARS

Student Empowerment Scheme



WORKSHOPS & TRAININGS



PBL

Project Based Learning

Developing Web Applications using REACT JS(27/06/2022 to 2/07/2022)

The expert session on "PBL on Developing Web Applications using React JS" was conducted as a value addition program under the Virtusa Center of Excellence on Full Stack Development. The session covered a wide range of topics related to React JS, including creating components, managing states and props, UI design and form implementation, integrating real-world APIs for data retrieval, routing, refs, hooks, error handling, and real-world application development.

Approximately 237+ students participated in this informative session, gaining valuable insights into React JS and its application in web development. The session aimed to equip APSITians with the necessary skills and knowledge to become proficient full-stack developers. Through hands-on learning and practical exercises, participants received comprehensive training that will undoubtedly aid them in their journey towards becoming proficient full-stack developers.



5 Days Online Short Term Training Program on "Developing Web Applications using REACT JS"

27th June to 2nd July, 2022

Resource Persons



Mr. Vineyak Narkar, Co-Founder WEBVARAD Solutions, Thane.



Prof. Yaminee Patil
Incharge Virtusa COE @APSIT on Java Full Stack Development.

COURSE CONTENTS

- React Fundamentals
- React Components, Component lifecycle
- State and Props
- React Router and Single page applications
- UI design, Forms, Events
- Animations
- Refs, Use effects
- Hooks, Flow architecture
- Model-View-Controller framework
- Redux, Flux
- Container Components, Error Handling
- Bundling the application

TIMING :

Session 1: 10.00 AM to 1.00 PM
Session 2: 2.00 PM to 4.00 PM

REGISTRATION LINK

<https://forms.gle/u4eAWExGkbwLzAgTA>

PROGRAM COORDINATOR

Prof. Yaminee Patil

CONTACT PERSONS

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DEPARTMENT OF INFORMATION TECHNOLOGY & DEPARTMENT OF COMPUTER ENGINEERING APSIT THANE

ESSENTIALS OF LINUX SERVER ADMINISTRATION AND NETWORKING

Short Term Training Program

Our college recently concluded a short-term training program on "Essentials of Linux Server Administration and Networking," providing students with a comprehensive foundation in IT. The course content included an introduction to Linux as an operating system, basic open source concepts, and essential Linux command-line skills. Participants explored network connectivity and communications, applying their knowledge through practical testing with Cisco Packet Tracer. The program also covered an introduction to databases and data modeling, basic SQL commands, and techniques for creating and connecting applications to databases. Certified instructors Neha Deshmukh, Sonal Jain, Sonia Aneesh, Manasi Choche, Geetanjali Kalme, and Archana Kotangle led the training, equipping students with valuable skills in server administration and networking and preparing them for future career opportunities in the tech industry.



A. P. SHAH INSTITUTE OF TECHNOLOGY
(All Branches NBA Accredited)







6 Days Online Short Term Training Program on "Essentials of Linux Server Administration and Networking"

29th to 31st July, 2022 & 5th to 7th August, 2022

Resource Persons



Prof. Neha Deshmukhi
Certified Instructor,
Cisco Networking Academy,
Red Hat Academy,
APSIT Thane.



Prof. Sonal Jain
Certified Instructor,
Red Hat Academy,
APSIT Thane.



Prof. Sonia Aneesh
Certified Instructor,
Cisco Networking Academy,
APSIT Thane.



Prof. Manasi Choche
Certified Instructor,
Red Hat Academy,
APSIT Thane.



Prof. Gauranjali Kalme
Accredited Instructor
Oracle Academy,
APSIT Thane.



Prof. Archana Kotangale
Accredited Instructor
Oracle Academy,
APSIT Thane.

COURSE CONTENTS

- Introduction to Linux as an operating System, basic open source concept and basics of the Linux command line.
- Basic network connectivity communications & its application.
- Introduction & testing of network through Cisco Packet Tracer.
- Information to database and data modeling & its mapping.
- Introduction to SQL.
- Creating and connecting application to the database.

TIMING :

Session 1: 11.00 AM to 1.00 PM

Session 2: 2.00 PM to 4.00 PM

REGISTRATION LINK

[https://zoom.us/join/register?
jtr=JttdOqtqD8iHNOWp7G3EG0JJiFKmSisUo8](https://zoom.us/join/register?jtr=JttdOqtqD8iHNOWp7G3EG0JJiFKmSisUo8)

PROGRAM COORDINATOR

Prof. Neha Deshmukhi

CONTACT PERSONS

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+91 98901 08724

Prof. Sonal Jain
+91 86929 18601

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**DEPARTMENT OF INFORMATION TECHNOLOGY
& DEPARTMENT OF COMPUTER ENGINEERING
APSIT THANE**



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HANDS ON SESSION:NVIDIA DGX WORKSTATION



The event titled "Effective Use of NVIDIA DGX Workstation for AI-Based Project: Hands-On Training" focused on leveraging the capabilities of the Nvidia DGX Workstation, designed for efficient data science and AI research. The institution boasts this cutting-edge technology to provide students with a rapid start in these fields. The training session, the first of its kind, was dedicated to Ambassadors and Members of the AI-ML Club.

Led by Mr. Vatsal Moradiya, a Solution Architect at Micropoint Computer Pvt. Limited, the session aimed to familiarize participants with the optimal use of the NVIDIA DGX Workstation for AI-based projects. The hands-on training covered various aspects of the workstation, demonstrating its functionalities and capabilities for effective implementation in AI projects.

This event not only showcased APSIT's commitment to providing state-of-the-art resources for students but also facilitated practical learning experiences for those interested in data science and AI research. The hands-on nature of the training allowed participants to gain valuable insights and skills in utilizing advanced technology for their projects.

HANDS ON SESSION: SOCIAL ENGINEERING ATTACKS

Training By Students For Students Session



The expert talk on "Live Demonstration on Social Engineering Attack" provided insights into the category of cyberattacks known as social engineering. This type of attack aims to deceive individuals into sharing sensitive information, ultimately granting unauthorized access to systems, physical spaces, or data. Contrary to common belief, these attacks do not solely originate from social media; however, social media facilitates attackers in gathering personal details to craft convincing social engineering schemes.

The primary objective of the expert session was to familiarize participants with prevailing cybersecurity threats, particularly focusing on the four vectors of social engineering: phishing, vishing, smishing, and impersonation. The talk emphasized the importance of awareness and shared strategies on how individuals can protect themselves from falling victim to social engineering attacks. The live demonstration aimed to provide practical insights into recognizing and mitigating the risks associated with these deceptive tactics.

EVENTS



INDUSTRIAL VISIT

Imperative Business Ventures



Recently A. P. Shah Institute of Technology, Thane - APSIT students from Computer Engineering, Information Technology, CSE Data Science & CSE AIML got opportunity to visit Imperative Business Ventures, Thane. The industrial visit to Imperative Business Ventures provided the students with a comprehensive understanding of the practical aspects of IT operations in an industry. The students gained knowledge of the different departments and their roles in the organization. Overall, the visit was informative and educational, and it helped the students to connect their academic knowledge with real-world applications. The students expressed their gratitude to the management and staff of Imperative Business Ventures for their hospitality and informative session.



INDUSTRIAL VISIT

Capgemini



Recently on 6 March 2023 Students of Department of Information Technology & Computer Engineering @ APSIT, Thane had a fantastic time at the industrial visit to Capgemini. Students got to learn about their cutting-edge technologies being used and how they're revolutionizing the IT industry. It was amazing to see the entire process of software development, from ideation to execution. The company's work culture was inspiring, and students learned a lot about teamwork and collaboration. The highlight of the visit was interacting with the employees who shared their insights and experiences with students. Overall, it was an enlightening experience, and A. P. Shah Institute of Technology, Thane - APSIT is grateful for the opportunity to have visited such a fantastic company. Thanks to Faisal Khan (T & P Officer @ APSIT THANE) & Capgemini Team for making this Industrial visit possible.

EXPERT TALKS

Designing Cyber Physical System for IoT Application



Technical talk on
DESIGNING CYBER PHYSICAL SYSTEM FOR IOT APPLICATION

July 20th, 2022 | 03.00 PM

008 Seminar Hall

Dr. Ashwini Gajarushi
Senior Technical Officer, TIH-IoT,
IIT-Bombay.

Dr. Sachin Paramane
CTO, TIH-IoT, IIT-Bombay.

IEEE APST Student Branch



The expert session on "Designing Cyber-Physical Systems for IoT Applications" aimed to enrich students with the latest developments in the Internet of Things (IoT). The seminar provided a detailed understanding of the functioning of IoT systems, utilizing examples such as home automation and smartwatches to illustrate practical applications.

The session delved into advanced design solutions for IoT devices, covering a broad spectrum of topics. A special focus was placed on sensor interfacing for IoT applications, offering an in-depth explanation of concepts like Sensor SoC (System on Chip).

Additionally, students were informed about the vast opportunities available in the field of IoT, and the session highlighted various fellowship programs, including the Chanakya Fellowship program. The presentation covered project areas, grants available for fellowship programs, and details about the Ayansh support grant.

To further support students' knowledge in IoT, information about IoT courses was introduced, covering both basic and advanced concepts. The session provided a comprehensive overview, ensuring that students were well-informed about the practical aspects, opportunities, and educational avenues in the dynamic field of IoT.

EXPERT TALKS

Sr. No	Expert Talk	Date	Resource person with Designation
1	Designing cyber physical system for IOT application	20-07-2021	Dr. Sachin Parmane, CTO, TIH-IoT, IIT Bombay Dr. Ashwini Gajarushi, Senior Technical Officer, TIH-IoT, IIT Bombay
2	Roadmap to BE Major project selection	22-07-2022	Dr. Kiran Deshpande, HOD-IT, APSIT Prof. Sonal Jain, Assistant Professor, APSIT
3	Digital Transformation in Cloud Technologies	08-08-2022	Nitin Sawant, Cloud leader, EY India
4	Intellectual Property Right (IPR)	10-08-2022	Dr. Shriganesh Yadav, Assistant Professor, APSIT
5	Webinar On Open Source, RHEL, System Admin Courses, Certifications and Career Opportunities	11-08-2022	Monika Gugnani, Technical Account Manager, RedHat
6	Red Hat Enterprise Linux Automation with Ansible	19-08-2022	Mr. Rajat Agrawal, Senior Training Consultant, RedHat
7	Session on Current Industry Adoption of AI- ML & DevOps	08-09-2022	Sandeep Khuperkar, Co-Founder and CEO, Data Science Wizards Pritesh Tiwari, Founder and Chief Data Scientist, Data Science Wizards
8	Effective Use of NVIDIA DGX Workstation For AI Based Project Hands on Training	21-09-2022	Mr. Vatsal Moradiya, Solution Architect Micropoint Computer Pvt Limited
9	GATE Awareness Session	21-09-2022	Mr. Rajeh Singh, Mr. Arun Kumar, Mr. Gopal Rabbewar, Trainer VisionGATE
10	Event on "Devops Engineer Career Path"	23-09-2022	Ms. Kavita Sakharkar, Lead Analyst, BA Continuum India Pvt. Ltd.
11	ML LIBRARIES: NumPy, Pandas, Matplotlib	24-09-2022	Mr. Jayesh Jain, Mr. Prathamesh Hambar
12	Use Of Git/Github in collaborative project development	30-09-2022	Mr. Rahulkumar Yadav, Student, APSIT
13	Session on Live demonstration on social engineering attacks	03-10-2022	Yash Umredkar, Student, APSIT
14	Deep Dive into Supervised Learning	08-10-2022	Mr. Athul Nair, Mr. Atharva Karekar, Mr. Shubhashish Mahapatra, Mr. Aniruddha Fale, Mr. Devanshu Mahapatra, Student, APSIT
15	Expert talk on JDBC connectivity	09-10-2022	Mr. Nilesh Saple, Senior Lead Software Engineer, John Deere
16	Introduction to open source and Hacktoberfest	09-11-2022	Mr. Jay Parmar, Open Source Contributor, naas.ai
17	Roadmap for Higher Studies at Abroad	11-10-2022	Sanjana Nalawade, Alumni, APSIT
18	Open Source cybersecurity tool	12-10-2022	Bhaktij Koli, Full Stack Developer
19	Expert Talk on "Nodejs"	13-10-2022	Dilesh Tanna, Full stack web developer, Headstrait
20	Road map for career planning	14-10-2022	Rikesh Kamra, Alumni, APSIT
21	Expert Talk on 'SSRF, XPATH Injection & LDAP Injection'	15-10-2022	Mr. Ashutosh Upadhyay, Junior Security Researcher, Raise Financial Services
22	Expert talk on 'Logic programming using PROLOG'	16-10-2022	Prof. Anup Kunte, HOD Konkan Gyanpeeth college of engineering, Karjat
23	Webinar on "Red Hat OpenShift I: Containers & Kubernetes"	18-11-2022	Dr. Vivek Yoganand, Openshift Specialist, Red Hat
24	How data science & AI leveraging open source to fuel innovation	13-01-2023	Mr. Sandeep Khuperkar, CEO, Data Science Wizards



EVENTS THROUGH IEEE STUDENT BRANCH @APSIT

Hacktoberfest



The Introduction to Open Source and Hacktoberfest event was conducted by IEEE APSIT SB and hosted at 11:20 am on an online platform i.e., YouTube. The hosts of the events were Swapnil Joshi and Rohan Waghode. The event was opened by Swapnil who greeted everyone and introduced the speaker to the online audience. The speaker also introduced himself to the crowd.

He acquainted the public with the open source and gave a brief insight about the Hacktoberfest event held on 9th October. The various programs involved in the open source were clarified like Google summer of code, Linux Foundation mentorship, Outreach, and MLH fellowship.

The queries about GitHub and the basic difference between git and GitHub were also described by the speaker. Hands-on demonstration of GitHub and a showcase of abundant free resources to learn git and coding were also displayed.

EVENTS THROUGH IEEE STUDENT BRANCH @APSIT

OPENAI



IEEE APSIT Student Branch

FUNDAMENTALS OF OPENAI

Tuesday, 14th March, 2023

Hannan Satopay
CEO Alhansat Technologies
IEEE Bombay Section Website and Social Media Chair

POINTS TO BE COVERED

- FUNDAMENTALS OF WORKING WITH CHATGPT.
- ABOUT OPENAI

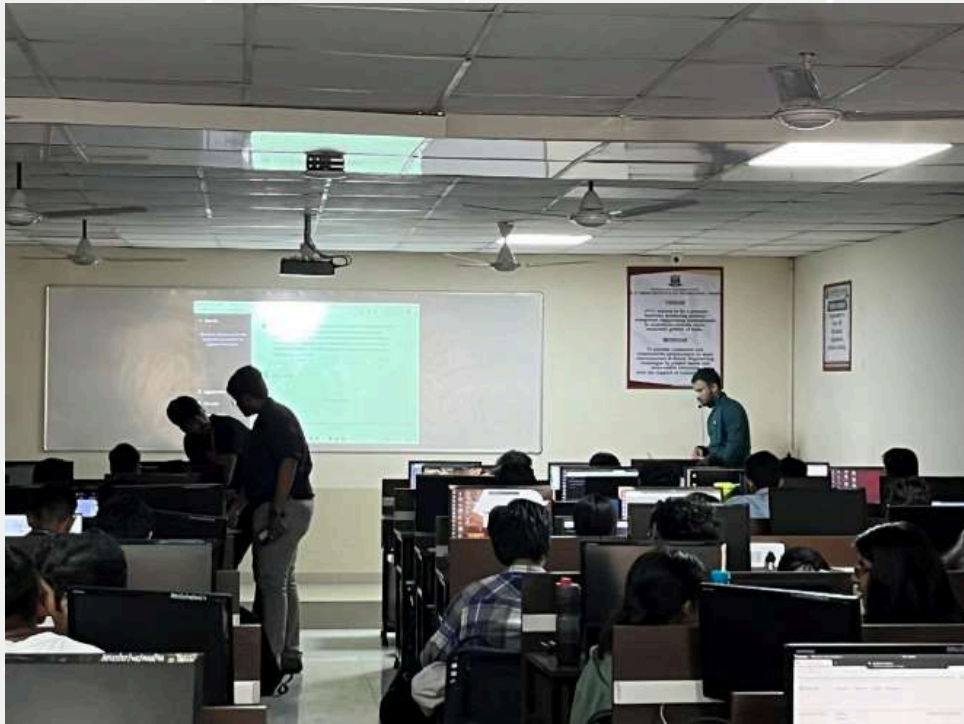
REGISTER NOW

IEEE APSIT SB in collaboration with CSA APSIT and ITSA APSIT, organised a rousing hands-on session on the topic of 'Fundamentals of Open AI' on 14th March, 2023. The speaker of the event was Hannan Satopy an experienced advisor with demonstrated history of e-learning, CEO of Alhansat technologies and IEEE Bombay Section Website and Social Media Chair.

This session was held in Lab 304 and commenced at 11:20 am. The event was opened by Harshita Talwar (Vice President of CSA) who greeted everyone and introduced the speaker. The mantle was then handed over to the speaker. He started the talk by describing the concepts of AI and how Chat GPT is one such example of it. He explained how complicated Unsupervised Learning is embedded in formation of database of Chat gpt and data segmentation which is capable of recreate stuff based on the knowledge it has. The hands on session gave everyone a brief insight to implement chat gpt with emerging technology statements that could be quickly solve using this. The event received a great response with 80 participants at its peak and keeping the enthusiasm high till the end of event.

EVENTS THROUGH IEEE STUDENT BRANCH @APSIT

OPENAI



EVENTS THROUGH IEEE STUDENT BRANCH @APSIT

Engineer's Day

On the distinguished occasion of Engineer's Day on September 15, 2022, the Information Technology Students Association at A. P. Shah Institute of Technology, Thane (APSIT), came together to celebrate this momentous day. The significance of this date lies in commemorating the birthday of Sir Mokshagundam Visvesvaraya, an eminent figure renowned as the first civil engineer of India.

As a collective of aspiring engineers, the students of APSIT embody a shared commitment to effecting positive change in the world. This commitment is deeply rooted in the valuable lessons gleaned from the experiences of great engineers of the past. The celebration of Engineer's Day serves as a poignant reminder of the responsibility and potential inherent in the field of engineering to contribute to societal well-being.

The event unfolded with a heartfelt tribute to the honorable Sir Visvesvaraya, recognizing and honoring his pioneering contributions that have left an indelible mark on the field of engineering. The homage paid at the onset of the celebration set the tone for an evening dedicated to acknowledging and appreciating the rich legacy of engineering.



COMPUTER SOCIETY OF INDIA

Hackscript 4.0

On 19th March 2023, the conclusion of the National level Hackathon, Hackscript 4.0, organized by APSIT, Thane, in collaboration with CSI, IEEE Student Branch, and IIC Apsit, has been officially marked. This extraordinary event saw the participation of 41 teams from various parts of Maharashtra in the final round. The success of this year's National Hackathon owes much to the participants, sponsors Data Science Wizards and Imperative Business Ventures Thane, industry mentors Sandeep Khuperkar, Preetesh Tiwari, Shivdas Nair, Kiran Roy, and dedicated volunteers.

Appreciation is extended to all participants, sponsors, mentors, and volunteers for contributing to the resounding success of Hackscript 4.0. The innovation, creativity, and passion displayed by each team were remarkable, shaping this event into a monumental success. From the formulation of innovative approaches to the development of cutting-edge software solutions, the participating teams truly embodied the spirit of innovation.



Winners of Hackscript 4.0 : National Level Hackathon



COMPUTER SOCIETY OF INDIA

IT Week

IT Week at A. P. Shah Institute of Technology, Thane - APSIT was recently conducted, showcasing a myriad of technology and innovation. The successful organization of IT Week by the Department of Information Technology highlighted the brilliance of our talented students.

Enlightening "Techno Sessions" were conducted throughout the week under the banner of the Information Technology Students Association (ITSA APSIT). These sessions, covering a wide range of technologies, provided valuable insights to their peers. The initiative, driven by the Information Technology Students Association @ APSIT, Thane, truly embodied their motive of "By the Students, for the Students."

To conclude the eventful week, IT Day was celebrated with enthusiasm. Students from our department actively participated in various Techno Games and Competitions, showcasing an inspiring level of talent and competitiveness.

Heartfelt gratitude is extended to all the students who dedicated their time, knowledge, and passion to contribute to the grand success of IT Week and IT Day. Their efforts have truly made a difference and served as an inspiration to many other students.

Special thanks go to Prof. Sonal Jain & the ITSA team for organizing this wonderful event, and to the faculty members for their constant guidance and support. ITSA & CSI eagerly anticipate more such exciting events in the future, where the Department can continue to embrace innovation, share knowledge, and empower students in the world of technology.

COMPUTER SOCIETY OF INDIA

IT Week



COMPUTER SOCIETY OF INDIA

EXALT 2K3

The successful conclusion of the university-level Project Exhibition competition on sustainability, waste management, and Industry 4.0 is enthusiastically announced by APSIT,Thane. This project exhibition was conducted as one of the mainstream events at the annual Techfest EXALT 2K3 organized by APSIT THANE.

An inspiring event that brought together some of the brightest minds in the University of Mumbai to showcase their innovative ideas and solutions for a sustainable future was witnessed by A. P. Shah Institute of Technology, Thane - APSIT. A diverse range of projects addressing critical challenges related to sustainability, waste management, and the latest advancements in Industry 4.0 technology was showcased.

Heartfelt gratitude is extended to all the participants, industry experts Sandeep Khuperkar, Nolin Chitnis, Santosh Mohite, the Management of Parshvanath Charitable Trust, Principal Sir Dr. Uttam Kolekar, Vice Principal Atul Deshpande, Faculty Coordinators Sonal Jain, Sonia Aneesh, Dr. Mamta Kurvey, Vishal Misal, Rajesh Behra, and everyone who contributed to making this event a grand success. The efforts and dedication of the participants have made this event a memorable one.

All participants are encouraged by the institute to continue their pursuit of excellence and contribute towards building a sustainable future. It is hoped that this event has inspired participants to think beyond boundaries and be the change-makers of tomorrow.

APSIT THANE looks forward to seeing all participants in future events and wishes all of them the very best in their future endeavors.

COMPUTER SOCIETY OF INDIA

EXALT 2K3

BE PROJECT Exhibition Winners

Sustainability

1st Winner



Anjuman-I-Islam's Kalsekar
Technical Campus, Panvel

2nd Winner



A. P. Shah Institute of
Technology

3rd Winner



Vidyavardhini's College of
Engineering and Technology

Industry 4.0

1st Winner



A. P. Shah Institute of
Technology

2nd Winner



A. P. Shah Institute of
Technology

2nd Winner



A. P. Shah Institute of
Technology

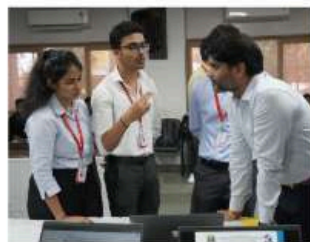
3rd Winner



M.H Saboo Siddik College of
Engineering

COMPUTER SOCIETY OF INDIA

EXALT 2K3



**Winners of Exalt 2K3 : University Level Project
Exhibition Competition**





PLACEMENTS

OUR RECRUITERS



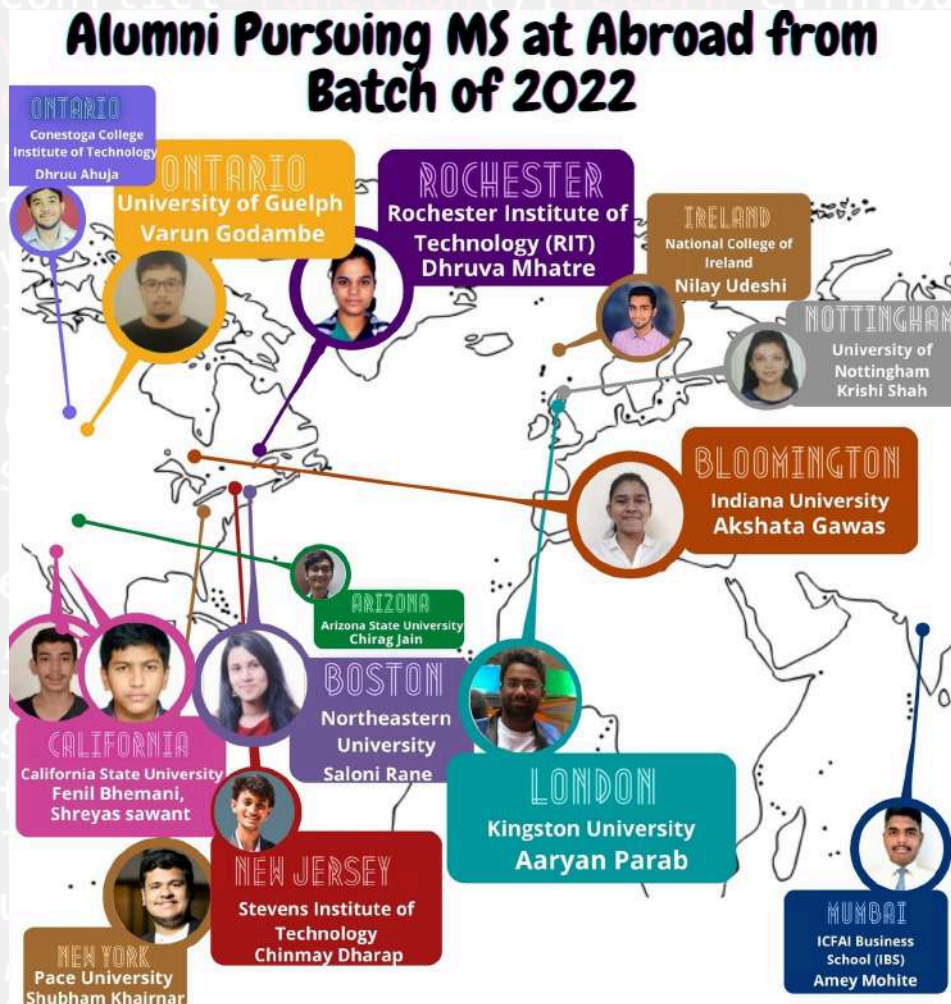
37 Students were placed during AY 2022-23.

Testimony

To help students in getting the best industry opportunities our training & placement cell provides various training programs & placement opportunities. We strive hard for overall development of students. Our students are placed in top-notch IT core companies during Academic Year 2022-23.

-By Prof. Geetanjali Kalme, TP Coordinator.

OUR RECRUITERS



13 Students were placed during AY 2022-23.

Testimony

To help students in getting the best industry opportunities our training & placement cell provides various training programs & placement opportunities. We strive hard for overall development of students. Our students are placed in top-notch IT core companies during Academic Year 2022-23.

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ARTICLES



Quantum Internet

Yogendra Kokamkar, BEIT

The Race to Build An Unhackable Online Environment

Many of us have uploaded our stories to the internet. Banking, work emails, Tradings, medical records – all that is vital, sensitive information. So it is little discomfoting that the internet has a fatal security flaw. Our private information is safe for now. But before any long, the encryption algorithms that protect us online are going to crack.

That is the urgent need behind a new, more secure kind of internet that leverages the power of the quantum world. Once up and running, the system will be able to do a lot more than protect our data.

The quantum internet is a network that will let quantum devices exchange information within an environment that harnesses the strange laws of quantum mechanics.

In the quantum realm, data can be encoded in the form of qubits, which are created in quantum devices like a quantum computer or a quantum processor. And the quantum internet will involve sending qubits across a network of multiple quantum devices that are physically separated but virtually connected. Thanks to the dense properties that are novel to quantum phases.

Quantum security points us to the theory of quantum cryptography which uses physics to manifest a crypto system secure against being compromised without the knowledge of the sender or the receiver of the messages.

Typically, quantum cryptography is based on the usage of individual particles/waves of light (photon) and their fundamental quantum properties to develop a solid cryptosystem.

Quantum cryptography uses photons to transfer a key. Once the key is transferred, coding and encoding using the normal secret-key method can take place.

Here, the key is encrypted into a series of photons that get passed between two parties seeking to share secret information. The Heisenberg Uncertainty Principle states that an adversary can't look at these photons without modifying or destroying them. According to this principle, only the sender and receiver can access the data and if some unintended person tries to access the data, the data will for sure change or destroy.

By leveraging this technology, we can certainly create an 'unhackable' online world.



Flutter

Vedangi Naigaonkar, TEIT

Flutter- The future of App Development?

Well, as rhetoric as the title seems to be, the very first question which pops up in mind is what is development? Development means to progress on something or to be better at what we are going. In the context of what this article has been written, this explanation doesn't seem to fit. Right? Then let me take you to the other main part of the title, "App Development"

The process of development started when the World Wide Web (WWW) came into existence. Through that came the concept of web development which led to the invention of the Hypertext Markup Language (HTML) in 1990. The other part of development is the App Development or Application Development which began somewhere after 1997. The iPhone was released in June 2007 and it rose to critical and commercial success. Native apps were developed, and just over a year later, the App Store was launched. Android began in 2003 as a project of the American technology company Android Inc., to develop an operating system for digital cameras. In 2004 the project changed to become an operating system for smartphones.

So, what exactly is App Development? The operating system is the core of any device; be it a laptop or a mobile phone or a small tablet. They all have one thing in common which is 'An Operating System'. Since its inception - iOS and Android, these two Operating Systems became a huge hit and have progressed since then. The iOS and Android, which go hand in hand are rivals. Both of them have been developed in separate programming languages and have their unique specialties. The "Applications" or "Apps" which run on them have their features as well. Apps are those products that make the life of a user simple. They not only serve various functionalities but can also have monetary profits. Thus, Apps are designed to make the life of a user as well as the developer easy.

After all these pros, there are some cons too. One of the major cons in developing apps for these two OS is the language barrier. iOS App work in Swift programming language while Android apps work in Java and Kotlin. Developers are forced to choose between either building the same app multiple times for multiple operating systems or accepting a lowest common denominator solution that trades native speed and accuracy for portability. Quite a problem, right? But here comes a solution- Flutter. With Flutter, we have a solution that gives you the best of both worlds: hardware-accelerated graphics and UI, powered by native ARM code, targeting both popular mobile operating systems. Flutter doesn't replace the traditional Apple and Android app models for building mobile apps; instead, it's an app engine that you can either embed into an existing app or use for an entirely new app.

Let's think of Flutter as a complete solution to all this. Flutter is fast, enables you to build beautiful apps. It is also productive and the main and best part is that it is open source. It uses the Dart programming language which is similar to Python. It is developed by Google. There are various packages in Flutter that can be installed at your convenience and to enhance the user experience. Flutter uses Hot reload (which is one of my favorites) feature to quickly install the App and see the changes made. We can modify our code and see the differences within a matter of a few seconds. Dart also has its packages. With a great User Interface, Flutter provides the concept of widgets that ensure that they are consistent for development and design.

Flutter is powered by the same hardware-accelerated Skia 2D graphics engine that underpins Chrome and Android. Flutter is an open-source project with a BSD-style license and includes the contributions of hundreds of developers from around the world. In addition, there's a vibrant ecosystem of thousands of plug-ins. And because every Flutter app is a native app that uses the standard Android and iOS build tools, you can access everything from the underlying operating system, including code and UI written in Kotlin or Java on Android, and Swift or Objective-C on iOS.

The Future of Flutter has already begun. On May 18, 2021 Flutter 2.0 was announced. It introduced the concept of Flutter Web which is an extension to the previous version of Mobile-App only Flutter. Apart from this, Flutter provides Firebase connectivity, null safety, and much more. Thus, Flutter is a complete package for any type of Mobile or Web App Development.

Flutter has a great future ahead. In the coming times, all major apps will be developed in it. Many large companies have already started using Flutter because of its cross-platform sustainability. Within three years of its inception, Flutter has managed to be one of the hot topics for anyone keen on App Development. Until then, keep coding. Ciao!



Blockchain

Sanjana_Nalawade, TEIT

Blockchain Technology: Road to transform India

Blockchain innovation is being hailed as the following huge thing by scientists and technologists, with applications going from finance to retail to healthcare.

Blockchain may appear complicated, and it can be, but its core concept is actually quite simple. A blockchain is essentially a type of database. To understand blockchain, we must first understand what a database is.

A database is a collection of data that is electronically stored on a computer system. Database information, or data, is typically organised in table format to facilitate searching and filtering for specific information.

So the question is,

what is the difference between using a spreadsheet to store information and a database?

Spreadsheets are intended for storing and accessing limited amounts of information by a single person or a small group of people. A database, on the other hand, is intended to contain substantially larger volumes of information that can be accessed, filtered, and changed rapidly and simply by any number of users at the same time.

Large databases do this by storing data on servers comprised of powerful computers. These servers can occasionally be built with hundreds, or thousands of processors to provide the computing power.

While a spreadsheet or database can be accessed by anybody, it is usually owned by a business and maintained by an assigned individual who has complete control over how it functions and the data contained inside it.

So how does a blockchain differ from a database?

The way data is structured differs significantly between a traditional database and a blockchain. A blockchain gathers information in groupings, often known as blocks, that hold sets of data. When a block's storage capacity is reached, it is chained onto the previously filled block, producing a data chain known as the "blockchain." All new information that follows that newly added block is compiled into a newly formed block, which is then added to the chain once it is complete.

A database organises data into tables, whereas a blockchain, as the name suggests, organises data into chunks (blocks) that are chained together. As a result, while all blockchains are databases, not all databases are blockchains. When implemented in a decentralised manner, this method creates an irreversible data timeline. When a block is completed, it is imprinted in stone and becomes a part of this chronology. When a block is added to the chain, it is assigned a precise timestamp.

Blockchain

Blockchain is a method of storing information in such a way that it is difficult or impossible to modify, hack, or scam the system.

A blockchain is essentially a digital ledger of transactions that is replicated and distributed across the blockchain's complete network of computer systems. Each block on the chain contains a number of transactions, and whenever a new transaction occurs on the blockchain, a record of that transaction is added to the ledger of every participant. Distributed Ledger Technology (DLT) refers to a distributed ledger administered by several individuals.

This means that if one block in a chain was modified, it would be obvious that it had been tampered with. To disrupt a blockchain system, hackers would have to modify every block in the chain, across all distributed versions of the chain.

Blockchains such as Bitcoin and Ethereum are constantly growing as blocks are added to the chain, considerably increasing the security of the ledger.

How blockchain can transform india?

Ledgers are essential. All money and assets on the planet are simply entries in a ledger. When you send money from London to India, the physical money does not fly there, but the entries in your and her ledgers do. Unfortunately, the way the system is set up presently, there are a slew of intermediates between you and her, all of whom have ledgers that must be reconciled. This creates friction, which creates time delays and costs.

Blockchain's essential characteristics—consensus, trust, immutability, provenance, and smart contracts—can provide us with transformative application cases.

Let's take agriculture as an example. Farming is in trouble, with 119 million farmers, 16% of the country's GDP, and around 8,000 farmer suicides per year.

In India, for example, farmers have gone on strike. The causes of the issue are well understood: inefficient subsidy management, a lack of insurance and loans, tiny land holdings, a lack of automation, and a lack of information. The blockchain is most equipped to addressing such issues.

For example, the blockchain may fuel tractor and farm equipment sharing via an Uber-like model. To tackle the mechanisation problem, you can go a step further and have fractional ownership of tractors with multiple-party financing.

Farm subsidies can be managed considerably more successfully using blockchain-based procedures. The blockchain is likely the greatest technology for digitising land records and so providing immutable ownership and provenance. Going a step further, one can leverage a blockchain's Digital Autonomous Organization capabilities to consolidate land ownership in a fair and equitable manner.

The other major transformational issue in India is electricity, particularly in rural areas. The existing centralised model of electricity—one central power plant with widespread distribution—is one of the major reasons for the lack of electrification.

This works well in crowded urban areas but fails in sparse rural areas due to cost and leakage issues. Electricity must be generated where it is needed, mostly through clean sources such as solar, wind, and biogas in rural regions

While this is feasible, many times the economics do not work—there are surpluses and deficits with no infrastructure or technology to manage them.

Power from a surplus house can be automatically transferred to a deficit house using smart microgrids powered by blockchain and the Internet of Things, and payments can be settled using a smart contract.

There are other transformational application cases in education and health. One of the issues in higher education is a lack of funding, as banks are concerned of fraud and bad loans. The NITI Aayog-led Indiachain effort is attempting to address this issue by using blockchain to store and authenticate educational degrees.

The opportunities are endless. However, we must recognise that the technology is still in its infancy and has numerous flaws. Some of these use cases may be true, while others may not.

However, several governments have begun to experiment: Estonia is putting everything on a blockchain, creating "a country as a service"; Dubai, Canada, and Japan are joining the race; even Mauritius has dubbed itself "Ethereum Island".

While the finance minister's mention of blockchain and efforts like Indiachain are encouraging, much more has to be done to actually alter India—and make it a "blockchain nation."



Bitcoin

Uddhabendra Maity, TEIT

The Bitcoin System

Bitcoin is a cryptocurrency that works on blockchain technology. It was created in 2009 by pseudonymous Satoshi Nakamoto. To understand bitcoin we need to first understand what a cryptocurrency is and the advantages of having cryptocurrencies.

Cryptocurrency is a digital currency that does not rely on banks for transaction verifications. It uses cryptography and is difficult to forge because of this security feature. There is no physical coin or bills involved, everything exists electronically. Cryptocurrency has made it easier to send and receive payments from anywhere to anyone because of its peer-to-peer system. Payments made are recorded as digital entries to an online database containing specific transactions. These cryptocurrencies are usually built using Blockchain technology that acts as a digital ledger of transactions.

Blockchain helps in making digital money decentralized, hack-proof, and digitally scarce. Normally in a centralized system, when two parties initiate a transaction, a ledger is maintained by the bank or an intermediary to validate the digital transaction. An amount is deducted by the bank authority from both parties for these provided services. Blockchain helps in maintaining this ledger in a decentralized way where no authority is required to maintain the ledger.

When two parties initiate a transaction, the blockchain assigns a cryptographically created hash or reference number. The transaction is recorded on a block which is then duplicated and distributed among other parties but cannot be edited. This transaction block is then verified using previously distributed blocks and is then appended to the other blocks creating a chain. The blockchain transaction is now complete and the ledger is updated.

Now coming back to Bitcoin, it is a form of digital cash maintained by a network of users. As an open-source network, anyone can become a user by downloading the software on their machine and then connecting to the Bitcoin network through the internet. Users on this network can do transactions with each other. When a transaction is made, all the users on the network can check the transaction to ensure its verification. This can be done by checking if the coins in the transaction really exist and if they belonged to the person sending the transaction. Since a public distributed ledger is maintained, no one can be cheated. New coins are created by using a process called "mining," which requires miners to solve computational puzzles. In what is called a lottery system, every 10 minutes a miner is rewarded with a new bitcoin. At first, it was 50 coins every 10 minutes, but this number drops every four years until, by the year 2140, the reward drops to zero. Till then, there will be 21 million coins in circulation, and there will never be more.



Flying Car

Tejas Raibagi, TEIT

The idea about flying cars has been around for over decades. How cool would it be if you can fly around and skip the annoying traffic and save hours on your travels? Now flying cars have finally become reality. A prototype of the flying car has successfully completed a test flight of 35 minutes between two cities in Slovakia.

The flying car has been developed by Klein Vision. According to the company, the AirCar Prototype 1 is powered by a 160 horsepower BMW engine and comes equipped with a fixed propeller. It transforms from aircraft to road vehicle in less than three minutes. It has also completed a total of 40 hours worth of test flight, including cruising at 8,200 feet and with a maximum speed of 118 mile per hour. The company is working on AirCar Prototype 2 which will be packed with a better 300 horsepower engine and will be able to achieve a maximum speed of 189 miles per hour with a range of 621 miles. According to the information available on their website Klein Vision has plans to develop three and four seater versions along with twin engines and an amphibious version.

"AirCar is no longer just a proof of concept. It has turned science fiction into a reality" - Anton Zajac.



BLUE EYES TECHNOLOGY

• Jahnavi Naik, TEIT

BLUE EYES TECHNOLOGY

Machines can see and feel too

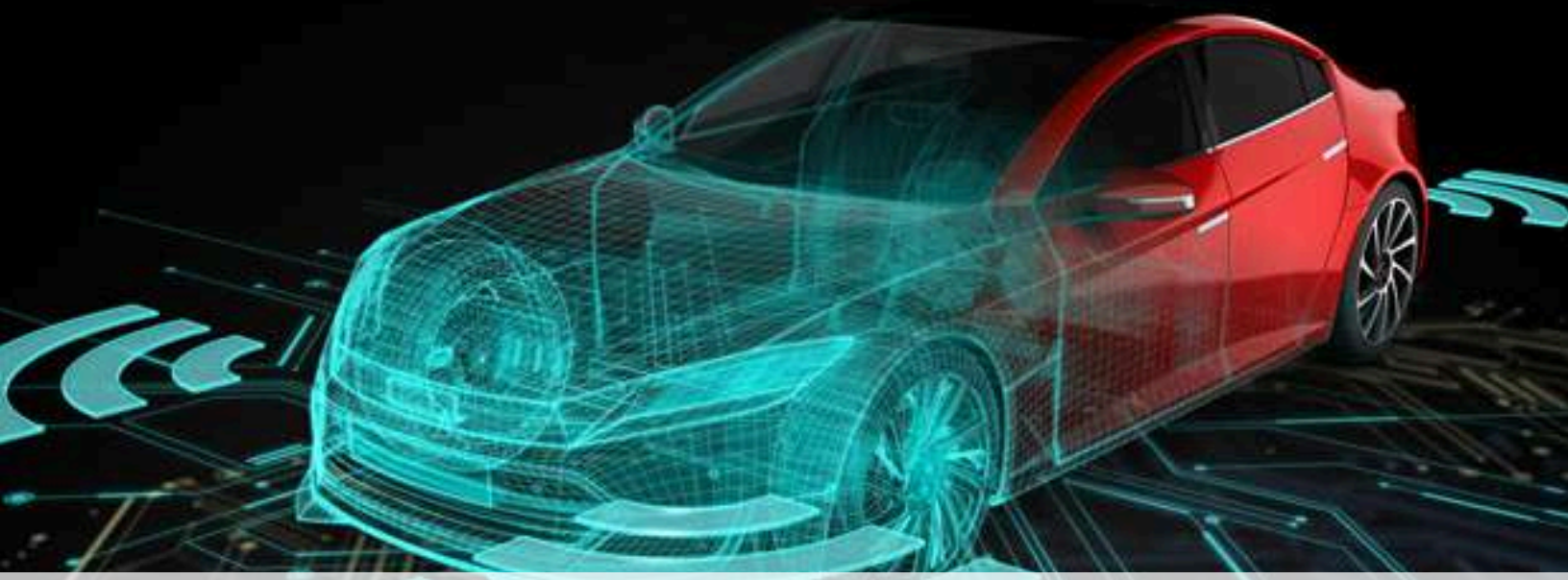
Blue Eyes Technology is a project initiated by the research team of IBM at its Almaden Research Centre (ARC) in San Jose, California, who have been researching it since 1997. The term was coined by putting together two words; "blue" stands for Bluetooth, which enables reliable wireless communication, and "eyes" represents the human eye, the movement of which can produce useful information. The goal behind 'Blue Eyes Technology' is to introduce the concept of machines being able to understand and mimic human perceptual powers and respond to them accordingly.

Blue Eyes Technology aims to create computers that can communicate with humans naturally, and interact with people as we do amongst ourselves. Similar to how human beings can perceive varied facial expressions and derive emotional responses, the ideal machine should be able to gather data about the user's physiological condition and react in accordance to the user's mood. It does so through the use of microphones and cameras, to record the human operator's actions. By monitoring and recording attention abilities, humans could have a more intimate relationship with machines than previously thought possible.

The hardware for the Blue Eyes Technology consists of two major components: the Data Acquisition Unit (DAU) and the Central System Unit (CSU). Bluetooth is implemented for the two units to communicate and coordinate with each other via a personal area network. The software of Blue Eyes Technology continuously supervises the user's emotional condition. It responds to the user in real-time. The software records user information (audio, video, physiological) and transfers it to the data analyzers. The supervisor is provided with a GUI module that informs about these parameters. Some intelligent devices implementing Blue Eyes Technology are Emotion Mouse, Simple User Interest Tracker (SUITOR), Manual and Gaze Input Cascaded (MAGIC), and Artificial Intelligent Speech Recognition.

Blue Eyes Technology reduces manual labor and increases efficiency by monitoring and studying human behaviors and responding appropriately. Supervisors and managers could utilize this technology as an advantage by having tailored data produced about their employees.

But (unfortunately, its system is very bulky, and not completely accurate, therefore proving to be highly expensive to implement in reality. However with AI cementing itself as automation of convenience, soon there might come a day where Blue Eyes is implemented in industrial and commercial sectors, and perhaps even households. Blue Eyes attempts to simplify human life in a user-friendly way and provides elegance to society.



Autonomous Driving

Greshma Sapra, TEIT

Autonomous Driving – Easy, Safe Driverless Drive

How can an industry tell whether it's going through a disruptive change?

One of the most distinguishing features of such transition is that technical innovation is no longer driven by the traditional industry leaders, but by new companies.

The automobile sector is now undergoing such a transformation. Two technological trends are driving it: the first being Electromotive and the second is Autonomous Driving, which is the most significant contemporary technology development.

"Driving is a skill that must be learned – this not only applies to people but is also true for automated and autonomous vehicles."

An autonomous vehicle is a vehicle equipped for detecting its current circumstance and working without human association. At no point is a human passenger necessary to assume control of the car, nor is a human passenger required to be present in the vehicle at all. A self-driving car can go wherever a regular car can go and accomplish everything a skilled human driver can do. The Society of Automotive Engineers (SAE) currently defines 6 levels of driving automation ranging from Level 0 (fully manual) to Level 5 (fully autonomous).

Now the question how do these cars actually work?

Autonomous vehicles depend on sensors, actuators, complex calculations, AI frameworks, and well-built processors to execute programming. Self-driving vehicles make and keep a guide of their environmental factors dependent on an assortment of sensors arranged in various pieces of the vehicle. Radar sensors screen the situation of close-by vehicles. Video Cameras distinguish traffic signals, read street signs, track different vehicles, and search for walkers. Lidar (light discovery and going) sensors skip beats of light off the vehicle's environmental factors to quantify distances, recognize street edges. Ultrasonic sensors in the wheels distinguish checks and different vehicles when leaving.

Different AI calculations, basically Computer Vision, are utilized to deal with the data from the sensors, to identify the entirety of different vehicles out and about around it. Such a framework would in a perfect world have the option to recognize where the vehicles are, the way huge they are, and how quick and what direction they're moving. In all actuality, these frameworks are intended to outline the whole climate around the vehicle.

Autonomous vehicles can possibly turn into a multi-trillion dollar industry. With enormous freedom comes large contest and there's no deficiency of that in this space. There are a couple of huge players including:

Tesla: All Tesla cars which are equipped with the appropriate cameras are used for collecting new training data.

Waymo: Waymo is a self-driving car company owned by Google. A big edge for Waymo is that they manufacture their own proprietary hardware for their cars.

Uber & Lyft: Uber and Lyft are both very popular ride-hailing companies and are in the perfect position to capitalise on self-driving cars. They're building their own fleets of self-driving cars equipped with cameras, radar, and LiDAR - multiple LiDARs in the case of Lyft.

Future of these cars?

In the wake of seeing the entirety of this cutting edge innovation and the huge headways being made, one asks: what distance away would we say we are from all out, Level 5 self-driving vehicles?

Some accept that the innovation is not exactly a couple of years away. Elon Musk guarantees that "in 12 month's time, we'll have over 1,000,000 vehicles with full self-driving". Furthermore, that absolutely might be conceivable.

Artificial intelligence is working on staggeringly quick with billions of dollars of subsidizing being filled state of the art research.

The genuine guarantee of self-ruling vehicles is the potential for significantly bringing down CO2 outflows, which would release the maximum capacity of independent vehicles: vehicle robotization, vehicle zap, and ridesharing.

These three revolution will definitely result in:

- Reduce traffic congestion (30% fewer vehicles on the road)
- Cut transportation costs by 40% (in terms of vehicles, fuel, and infrastructure)
- Improve walkability and livability
- Free up parking lots for other uses (schools, parks, community centers)
- Reduce urban CO2 emissions by 80% worldwide.

Less pollution, less traffic, more efficiency, and safer driving can all be expected when cars become self-driving. Thus to conclude, the innovation is moving the correct way and will ideally get a brilliant, self-ruling future.



Neuromorphic Computing

Utkarsha Potdukhe, TEIT

Neuromorphic computing is a method of computer engineering in which elements of a computer are designed to mimic the human brain and its nervous system. This computing is a rapidly growing area of computer science research. In this type of computing, computers are used to mimic the brain wherein specialized computer chips replicate the way the human brain processes multi-fold information. This area not only allows neuroscientists to create new models of the brain, but it also allows robotics experts to develop robots that can navigate intricate environments using computer vision.

The working of this computing involves assembling of artificial neurons based on functions of the human brain. These artificial neurons and synapses are responsible for transferring information similar to that of living neurons. Neurons communicate with each other through spikes of electrochemical energy. Hence, it works on Spiking Neural Networks, where each neuron sends independent signals to other neurons.

Talking about its latest application, Intel Labs has developed a neuromorphic research chip named Loihi in the year 2018 which includes many digital circuits that exactly mimic the brain's basic operations.

Some of its potential applications includes: Driverless cars, Natural language understanding, smart home devices, Adaptive Robotics Researchers are hopeful that neuromorphic computers will solve more real-time complex field problems



Video Games

Akansha Rawat, SEIT

How an Online Videogame Accurately predicted the Pandemic Outburst

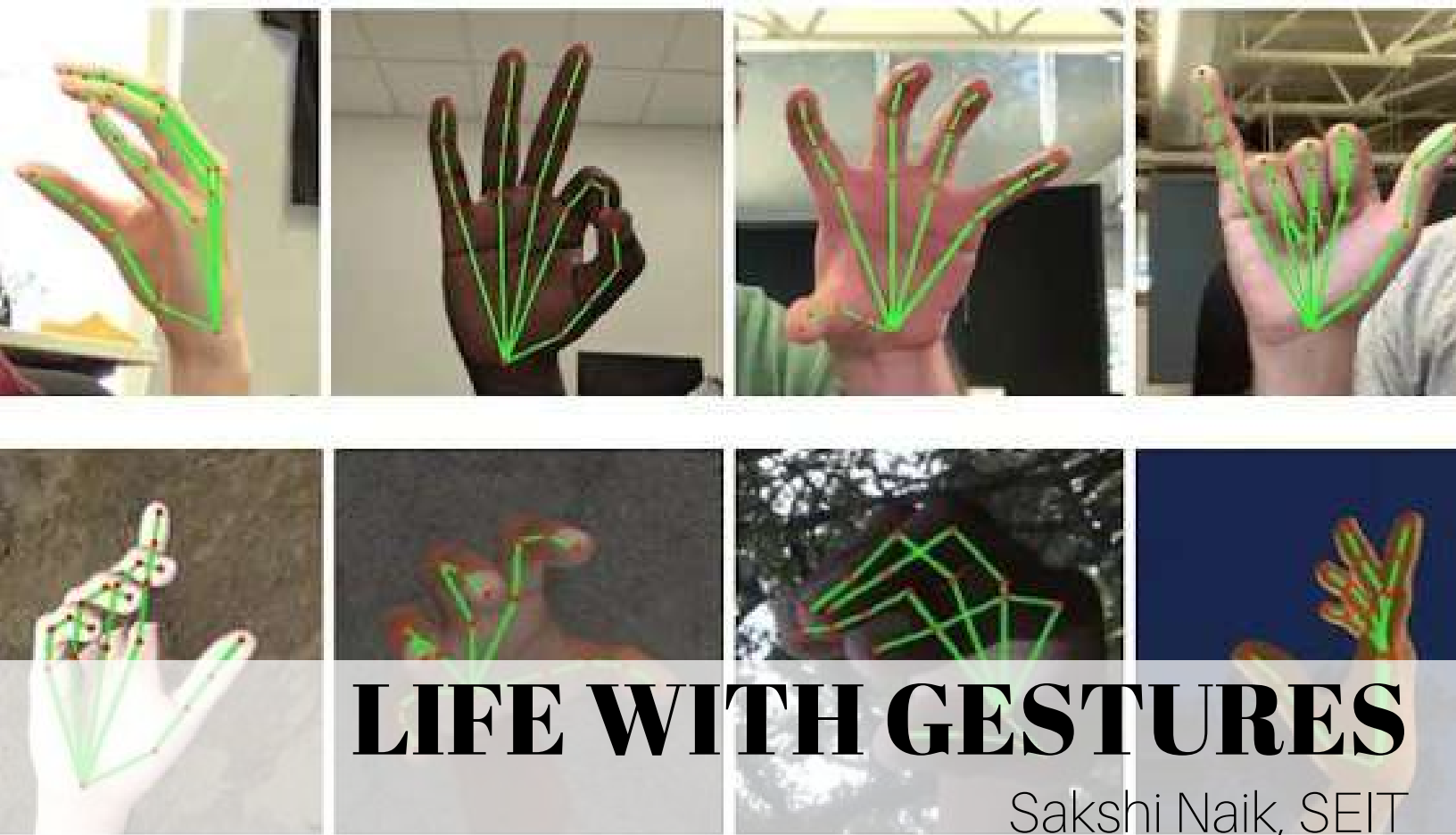
Let me take you back to 2005. It had only been about a year since World of Warcraft, commonly known as WoW went online. WoW is a Massively Multiplayer Online Role-playing Game of MMORPG. It featured a massive map consisting many cities and villages. For 2005, it was truly a massive game. Players could build their own custom characters and join their friends to battle enemies. Even to this date, this game, launched in 2005, still boasts over 2,202,986 daily players and over 115,946,619 total players.

Now that you know a little about the game, let me take you back to a specific date, September 13th, 2005. This was the date on which a new part was added to WoW's existing map and it featured a new questline with a final boss. It was suggested that only players having maximum in-game levels attempt this questline because of how difficult it was. The centrepiece of this questline was the final boss by the name of "Hakkar the Soulflayer." Hakkar was a unique boss. While fighting him, if a player got too close to him, the player would get affected by a debuff (an effect that makes the player weaker) that would reduce the player's health points over-time. This was known as the "Corrupted Blood" ability and that's where the entire incident gets its name from.

In addition to reducing health points, this debuff also spread to anyone who was near the infected character and thus we see how it imitated a real-life epidemic. Now, the developers had designed this entire level and the Corrupted Blood ability in a way that every time the player exited the boss location, the debuff would be instantly removed from the character. This made sure that the debuff wouldn't spread to anyone who isn't in the boss location. What the developers missed, however, is that players could have "pets" or "companions" with them which could also get infected. What ended up happening was, any of the players that had pets and had visited the boss location, instantly had their debuff nullified when they exited the location, but their pets still had that debuff. In turn, the pets spread the debuff to their owners and the owners now spread the debuff to anyone who came in contact with them even if they were outside the boss location. And thus started the epidemic of WoW.

As we can see, this is also how epidemics can spread in the real world, through animals. But that isn't where the similarities stop. Once outside the boss location, an infected character spread the debuff rapidly, infecting everyone in their vicinity, even NPCs (non-playable characters.) These NPCs provided players with new quests and because the NPCs are not actual players, they did not show any signs of the debuff like health point damage. In a way, they became the asymptomatic carriers of the virus. The real-life parallels did not end here either. 2005 was an age before WhatsApp or Instagram. The only way for people who were not in the infected city to see what the debuff was like, was to go to the city, which they did and in turn, even these characters got infected. When these characters tried to run away from the debuff, they ended up infecting smaller places where the debuff hadn't spread yet. A community-wide voluntary lockdowns were implemented, and eventually, the developers fixed the code and everything returned back to normal.

The "Corrupted Blood" incident was by far, extremely accurate in its real-world parallels down to the way people behaved in those situations. This got the attention of the CDC or Center for Disease Control and numerous papers have been published regarding the same. In one of these papers, the idea of using MMORPGs as testing grounds for disease outbreak research was proposed. So the next time someone tell you that video-games are a waste of time, tell them about how they almost prevented an outbreak.



LIFE WITH GESTURES

Sakshi Naik, SEIT

To think about future technologies is an unavoidable, unpredictable concept. Nowadays people come up with new ways to make the future bright. Here is one of the most upcoming futuristic technologies that is Gesture-based computing. Gesture-based computing has received great attention in educational technology. This technology is on the rise in marketing interactions between brands and consumers.

What is Gesture-Based Computing Technology?

Gesture Technologies works on the most featured combination of 3D depth-sensing cameras with IR cameras. Several technologies are being used for gesture recognition, each of which has its own unique advantages and disadvantages. This instead of typing from an input device or tapping on the screen, a motion sensor and sensing cameras are used to capture the motion user.

Considering its types, they are categorized as Offline gestures and Online gestures. In Offline gestures the gestures proceed after the user interaction with the object, and in Online gestures they are used to scale or rotate a tangible object.

This technology may have two approaches one is 3D model based and another is appearance-based. In 3D model based approach can use volumetric or skeletal models, or even a combination of the two, whereas they derive the parameters directly from the images or videos using a template database.

Application Gestures Based Technology

This technology can be used in many fields like Sign Language recognition, Social assistive robotics, control through facial gesture, Gaming console.

Gesture Based Technology results are mapped to infrared control signal and used to control various home appliances with infrared remote control.

Challenges in Gesture-Based Computation Technology

There are many challenges related to gesture based technology like it must process false negatives, gestural user experiences require more processing power than necessary. In order to capture human gestures by visual sensors, robust computer vision methods are also required, for example for hand tracking and hand posture recognition.