Late Shri. Vishnu Waman Thakur Charitable Trust's

VIVA INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi, DTE, Govt. of Maharashtra and Affiliated to the University of Mumbai)

COMPUTER ENGINEERING DEPARTMENT

BOOTSTRAP

2021-22

THE NEWSLETTER OF COMPUTER ENGINEERING DEPARTMENT

EDITOR: Publication Team, Computer Engineering Department

The computer engineering department was established in 2009. The department offers regular undergraduate program in "Computer Engineering" having intake of 60.

Our vision is to develop competent citizens who will be valuable contributors in the field of technology and science. And, our mission is to create an environment which will stimulate research, creativity and innovation and to provide students with comprehensive knowledge of the latest developments in Computer Engineering.

The department has young dynamic, qualified teaching and non-teaching faculties with well-equipped laboratories. The teaching faculties are actively involved and also encourage students in research and publishing papers in reputed journals and conferences. The faculty and students have presented and published research papers in reputed conferences and journals like IEEE, IJCA, IJOER, NCRENB, etc.

The department has taken conscious efforts to keep the faculty and students up to date with the change in the technologies and tools. The faculty members and the students are involved in the

organisation of guest lectures, seminars, workshops, conferences, etc. the CSI-VIVA TECH provides a great platform for the students to showcase their knowledge. For this technical event have been undertaken by the department on constant basis.

VISION

VIVA Institute of Technology strives to impart total quality education by means of equip students with knowledge and skills in their chosen stream, inculcate cultural and ethical values, identify hidden talents, provide opportunities for students to realize their full potential and thus shape them into future leaders, entrepreneurs and above all good human beings.

MISSION

To develop the standard of the institute above bench mark level, providing students with advanced knowledge and latest technology in the chosen discipline by tapping their hidden and obvious potential, moulding them into good and responsible citizens by playing a meaningful role in industry and society.

VISION (COMPUTER ENGINEERING DEPARTMENT)

To develop competent citizens who will be valuable contributors in the field of computer engineering.

MISSION (COMPUTER ENGINEERING DEPARTMENT)

- To create an environment which will stimulate research and innovation.
- To provide students with comprehensive knowledge of the latest developments in the field of Computer Engineering.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)
COMPUTER ENGINEERING DEPARTMENT

- Graduates will have successful career in their chosen field.
- Graduates will work on new and emerging technologies.
- Graduates will pursue higher studies at reputed institutions nationally/internationally.

PROGRAM SPECIFIC OUTCOMES (PSOs)
COMPUTER ENGINEERING DEPARTMENT

- Students will be able to draft and publish research papers at the national or the international level.
- Students will be able to undertake research based projects.
- Students will be able to organise / participate / conduct events like seminars / workshops / conferences.

PROGRAMME OUTCOMES

Engineering Graduates will be able to:

PO1: Engineering Knowledge: apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design & Development of Solutions: design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct Investigation of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions**.**

PO5: Modern Tools Usage: create, select and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6: The Engineer and Society: apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment & Sustainability: understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PO9: Individual & Team work: function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings

PO10: Communication: communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management & Finance: demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long Learning: recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Departmental Advisory Committee for 2021-22

Sr. No.	Name	Designation
1	Management	Coordinator
2	Dr. Arun Kumar	Principal
3	Ashwini Save	HOD, Computer Engineering Department
4	Sunita Naik	NBA Task Force 1
5	Janhavi Sangoi	Project Head
6	Reshma Chaudhari	NBA Task Force 1
7	Umesh Mohite	CSI Head
8	Monali Pimpale	Placement Coordinator
9	Meet Makwana	Student
10	Sanjana Desai	Student
11	Payal Das	Student
12	Juilee Bhombe	Alumni
13	Milind Arjun Jadhav	Parent
14	Ramesh Laxman Ghadi	Parent
15	Ankit Sangoi	Industry Expert
16	Prachodaya Thakur	Industry Expert

Student Testimonials

	Name: Vishal J Bangera **Batch:** 2020 **Designation:** Associate System Engineer Trainee at TCS for Posten Norge Project

The departments are supportive and encourage extracurricular activities, both technical and non-technical. Different workshops are helped me to gain hands on experience of technologies. They are also focus on academics. Extra sessions are held for students who are weak in any subject. Feedback sessions are held to keep the teaching process up to the mark. Parent teacher meetings are held every year to keep the parents in the loop.

	Name: Utkarsha Pravin Pawar **Batch**: 2020

My four years of computer engineering were an overall bundle of joy, happiness and full of memories. I got abundant knowledge about not only my study course but also about the real-life market demand. Skill training, personality development were the things that were taught the most. My department arranged many workshops related to core technical subjects and those which were demanded by us students as well. Career guidance was looked upon under the training and placement section where in the right path was shown to us with personal guidance and one on one conversation with the student by taking into consideration his/her interest, skills and the type of job the student wants to do. Our faculty used to accompany the students personally on the day of the interview and aptitude as well. To assure better placements college even arranged lectures for confidence boosting, English speaking, verbal, quants and coding as well. The best part about these four years was we had a mentor for every one of us to speak up to the professor personally about the issues or the problems that we are facing. Mentor meetings used to be held occasionally without fail in which the mentor used to take up small group wise activities where in removal of stage fear through public speaking, debates or discussions took

place. The mentor used to keep the record of us and timely update was given to HOD. Our HOD personally gave attention to every single student of the batch. Attendance follow up, parent teachers meet and student's behavioural aspect with his/her grade improval, active participation was all recorded by HOD mam where she gave personal attention to every student. Extra lectures were taken by the staff for the weak students. Doubt solving lectures too were scheduled accordingly. Inter collegiate activities too were the part of education which included many technical competitions like the hackathon, project presentation and non-technical competitions like the youth festival. All the teachers helped and supported us during the preparation of any competition. They even accompanied the students during the day of the competition. Project guides encouraged us to publish technical papers in the international journal like IEEE and national journal like the NCRENB. Follow up of every small event or projects used to be done every week. College even organised fests, annual day function and events both the technical like the Techfest and non-technical along with sports gathering for the students. The most important thing is college provided with library along with the digital one where the librarian personally used to download and send the e-copy to the students. Canteen facility, huge sports grounds, big campus surrounded by plenty trees in the beauty of the nature and best teachers gave us everything that a student wishes for. The teachers were kind, caring and most importantly helping in nature even gave some financial support to students in need. Talking to our teachers was equal to talking to a counsellor where they explained and gave us the correct path in a friendly way whenever we were in need. Teachers kept the environment of the classroom joyful giving us abundant knowledge. Teaching was great, every professor completed the syllabus and accordingly practicals were performed without fail. Discipline, following rules and regulations were prioritized. Yoga day, swami Vivekananda born day, tree plantation drive, etc were all celebrated with whole enthusiasm. College also arranged guest lectures where they called Dr. Prakash Baba Aamte, etc. College trained us to be better individuals with everything they taught, we are lucky to be a part of this family. All I am today is because of the individual attention that our teachers gave on us and I thank everyone as you all moulded us into the best version of ourselves.

Name: Gaurav Vijay Suryawanshi
Batch: 2020
Designation: System Engineer at Infosys

I really feel great to write here, I am honored to be an ex-student of the Institute, and Thank you for the efforts that you all have put in me to make sure my future gets brighter than ever, I am really thankful to the department for supporting and always pushing me towards the success, Professors of the department taught us to visualize how success looks. Teaching by the professors was a very enthusiastic and innovative approach which made the subjects more interesting to study and ace the academics, Professors helped me to develop a problem-solving attitude with a positive attitude which will be a life lesson for sure. Apart from teaching and academics, Professors were very kind and talented in other activities, coordinating with students

in extracurricular activities helped me to learn interpersonal skills which made the student-professor relation more friendly and transparent. The Institute has a mentor system where a group of students is assigned to one professor, the department was slightly different, every professor was like a mentor to me.

"The Professors here are astounding and there are always willing to support you in anything you need. It can be overwhelming as a student but also exciting because you know you'll be learning a lot from the professors, department, friends"

Name: Sanjana Shyam Desai
Batch: 2021
Designation: Currently Pursuing Master's Degree in Computer Science at University of Texas, Dallas

It was my immense luck and fortune that I got into VIVA Institute of Technology where I can grow. The professors of the Department helped not only me but everyone to enhance their academic as well as interpersonal skills. Professors have some innovative style of teaching what made learning here more interesting. They taught us how to look at problems and solve them in innovative way. The Department helped me a lot to develop my personality by providing various platforms to prove myself.

They have proper schedule fixed for each and every subject, so because of that it was easy for me to give time to every subject and to think about the higher studies and also prepare for it. Because of VIVA Institute of Technology today I find myself in a very fulfilling position career wise and as an individual. I my glad to be part of this college.

Name: Siddhi Naik
Batch: 2018

I can positively say that computer engineering department has made me a better person. It has helped me develop a positive attitude towards my studies and discover more about myself. Teachers are very caring and interested in student's well-being. The thing I admire the most is the support I received from the department. I wouldn't have been able to achieve what I have achieved without the supportive environment.

Name: Himanshu Wadekar
Batch: 2017

I couldn't have asked for more; the teachers were so helpful to me, whenever there was anything I needed or didn't understand they were always there without delay. Along with academic, they even make sure that students are active in different curricular activities. The environment not only helped me in imbibing knowledge but also in developing my overall personality, fueling confidence in me.

Name: Tasmay Raikar
Batch: 2017

I am student of the Computer Engineering Department at VIVA Institute of Technology. This department has provided me good faculties and helped me a lot in completing my Engg course. They always inspired me to develop different aspects of my personality to be more competitive and balanced individual. They provided me a mix of both academic's stuff and co-curricular activities. I am grateful to everyone from this department for their guidance and support.

Name: Durgesh Tiwari
Batch: 2017

As a Computer Engineering student department provides a wide arena of the field and thus I get to learn something new with every subject. The entire study environment makes it easy for a student to learn and inculcate the spirit to stand out amongst the talented and hard-working students. What amazes me is the plethora of extracurricular activities that the Institute offers hence compelling every student to explore and pursue his/her extra talents. The Institute manages both the areas extremely well and a student always finds himself in a pool of never ending opportunities, be it technical or non-technical.

Department Faculty

Name: Prof. Ashwini Save
Designation: HOD
Qualification: PhD. Comp. Engg. (Pursuing), ME Comp. Engg., BE Inft, PGDBA
Research Interests: Data warehouse, Data Mining, Software Engg, Machine Learning, Deep Learning, AI, Project Mgmt.

Name: Prof. Pallavi Vartak
Designation: Asst. Prof.
Qualification: ME Inft, BE Comp. Engg
Research Interests: Image Processing, HCI, Project Mgmt

Name: Prof. Sunita Naik
Designation: Asst. Prof.
Qualification: ME Comp. Engg., BE Inft.
Research Interests: Database management System, Data Mining, Image Processing, Distributed Computing

Name: Prof. Janhavi Sangoi
Designation: Asst. Prof.
Qualification: ME Comp. Engg., BE(Inft)
Research Interests: Data warehouse, Data Mining, Security

Name: Prof. Reshma Chaudhari
Designation: Asst. Prof.
Qualification: ME EXTC , BE EXTC
Research Interests: Mobile Communication, Digital Signal Processing

Name: Prof. Umesh Mohite
Designation: Asst. Prof.
Qualification: ME Comp. Engg., BE Comp. Engg
Research Interests: Microprocessor, Data and Network Security, Cryptography

Name: Prof. Vinit Raut
Designation: Asst. Prof.
Qualification: ME (Comp. Engg.), BE (Comp)
Research Interests: Data Structures & Algorithms, Image Processing, Cloud Computing, Computer Network

Name: Prof. Saniket Kudoo
Designation: Asst. Prof.
Qualification: ME Comp. Engg., BE Comp. Engg.
Research Interests: Cloud Computing, Mobile Computing, N/W Security, Computer N/W

Name: Prof. Akshata Raut
Designation: Asst. Prof.
Qualification: ME Comp. Engg., BE Comp. Engg.
Research Interests: Data Mining and Sentiment Analysis.

Name: Prof. Monali Pimpale
Designation: Asst. Prof.
Qualification: ME Comp. Engg., BE Inft.
Research Interests: Networking and Machine Learning

Name: Prof. Bhavika Thakur
Designation: Asst. Prof.
Qualification: ME Comp. Network and Info. Sec., BE Comp Science and Technology
Research Interests: Network Security and Computer Network

Name: Prof. Kirtida Naik
Designation: Asst. Prof.
Qualification: PhD. (Pursuing), ME(Computer Engineering), BE(Computer Engineering)
Research Interests: Machine Learning, Deep Learning

Recent Publications by Faculty

Sr. No.	Name of the faculty	Paper Title	Published / Presented
1	Ashwini Save	A Secure Authentication Protocol for Enterprise Administrative Devices	ICACCS 2022
		A review on the protocol systems for security enhancement of administrative devices.	NCRENB 2022
2	Pallavi Raut	Fraud Apps and Virus Detection System	International Journal for Science and Advance Research in Technology (IJSART)
3	Sunita Naik	Blockchain based Real Estate Management System	NCRENB 2022
4	Janhavi Thakur	FR-PAY-A secure approach for payment	NCRENB 2022
4	Reshma Chaudhari	Smart Interviews Using AI	IJCESR
		Smart Interviews Using AI	NCRENB 2022
5	Umesh Mohite	VIRTUAL ASSISTANT FOR ELDERLY PEOPLE	International Journal for Science and Advance Research In Technology
6	Vinit Raut	Intelligent Eye - App for Visually Impaired Peoples	NCRENB 2022
		Experimental research on cloud based online voting system	IJSART journal
7	Akshata Raut	Scorpion Shield	IJSART

		Try On:A Virtual Dressing Room	
8	Bhavika Thakur	Review paper on Morse code-based communication system focused on amyotrophic lateral sclerosis patients	NCRENB 2022
		Special Child Care App	
9	Kirtida Naik	Yoga pose detection using machine learning	IJSART
		CRYPTO CURRENCY PRICE PREDICTION SYSTEM	
		A Review of Machine Learning Algorithms For Cryptocurrency price prediction	NCRENB 2022

Faculty Role and Responsibilities

Name of Faculty	Departmental Responsibilities
Prof. Ashwini Save	Head of Department
Prof. Pallavi Vartak	- Class In-Charge - NBA TF-2 - Discipline Head - Alumni Head - Publication Team Magazine
Prof. Sunita Naik	- Exam coordinator - Time-Table Head - NBA TF-1 - Publication Team Magazine
Prof. Janhavi Sangoi	- Project In-Charge - Time Table Head - NBA TF-2 - NBA Head
Prof. Reshma Chaudhari	- NBA TF-1 - Class In-Charge - Result Analysis
Prof. Umesh Mohite	- Lab Head - CSI Head - NBA TF-3 - Discipline Head - Publication Team Member
Prof. Vinit Raut	- Google Drive Documents Head - Class In-Charge - Virtual Lab Coordinator Head - NBA TF-4 - Publication Head - Faculty Feedback - Online Exam coordinator - Lab In-Charge: Lab-2
Prof. Saniket Kudoo	- Term Test Head - Weak and Bright Students Head - NBA TF-2 - Student Participation

	• Member of Publication Team for Tech-Next Magazine • Lab In-Charge: Lab-4 • Member of Discipline Team
Prof. Akshata Raut	• File Handling • Term Test Head • NBA TF-6 • Lab In-Charge: Lab-6 • Online Exam coordinator
Prof. Monali Pimpale	• Training and Placement coordinator • Department Library • Internship coordinator • NBA TF-4 • Notice board In-Charge • Lab In-Charge: Lab-2
Prof. Bhavika Thakur	• FE Head • Mentor Head • Departmental Achievements • Departmental Notices and Meeting Minutes • Publicity(Facebook) • NBA TF-6 • Lab In-Charge: Lab-3

Training Programs / Seminars / Workshops attended by Faculty

Sr. No.	Name	Training Programme
1	Pallavi Vartak	• Create interactive e-learning content online course
2	Sunita Naik	• Cyber security awareness
3	Vinit Raut	• Research Trends in Information Technology-2021(FDP) • Orientation of "Mini Project 2A" of Semester V of Rev-2019 'C' Scheme • IBM SkillsBuild – Basics of Artificial Intelligence • Orientation of TE Computer Engineering (Rev.2019) "Semester V Computer Network(CSC-503)" • NDLI user awareness session • Python with Data Science
4	Akshata Raut	• Online JavaScript course • Create interactive e-learning content online course • Cyber security awareness • Creating interactive e- learning content
5	Bhavika Thakur	• NITTTR: Problem Based Teaching Learning Process • AICTE: Inculcating Universal Human Values in Technical Education
6	Kirtida Naik	• SE Orientation • AI Orientation • UHV (FDP)

Laboratories

No.	Laboratory Name	Lab No.	Location
	Server Room		A-301
1	Database Management System Lab	E1	A-302
2	Data Structures & Algorithm Lab	E2	A-303
3	Software Engineering & Web Engineering Lab	E3	A-304
4	Network Lab	E4	A-305
5	Project Lab	E5	A-307
6	Programming Lab	E6	A-308
7	Operating System Lab	E7	A-309
8	Language Lab	E8	A-310

Class Room Details

No	Class	Room No.
1	S.E. Comp. Engg.	B-302
2	T.E. Comp. Engg.	B-303
3	B.E. Comp. Engg.	B-301

Faculty Development Initiatives

1. Department Library

The department strives to provide with the best possible opportunity for the staff and the students to enhance their knowledge, departmental library is one initiative taken by the department in this regard.

The departmental library is managed by a staff in-charge. The library gives easy access to the books and research projects for both the faculty and students. Currently the departmental library has over 300 books.

2. Appraisal System

An effective performance appraisal system is a vital instrument for gauging and improving the performance and contribution of the faculty. The institute has a well-defined appraisal and well formatted appraisal system and it is effectively implemented in the department. Every teaching faculty submits self-appraisal forms to the head of the department. The head of the department evaluates the self-appraisal from filled by the faculty and comments on the performance of the faculty. This form is then sent to the principal.

In presence of head of department principal conducts one to one meeting with all the teachers gives feedback/suggestions/comments on the performance. The performance appraisal is carried out in each semester. In every academic year awareness is also created among the faculty about the importance of performance appraisal, in the department.

3. Feedback System

According to the schedule mentioned in academic calendar, HOD of department takes offline feedback from students. Students are provided with a copy of feedback form which assesses the staff on the basis of parameters. Parameters used to assess the faculties are Way of teaching, Extent of understanding the subject & satisfaction, Ability to clear the doubts, Attitude towards the students, Punctuality, Interaction during lecture, Motivation.

Students also give comments about faculties in a written form. Ratings are calculated on the basis of score and comments given by the students. Depending on the comments and ratings by the students, HOD communicates and guides the staff regarding further improvements through corrective actions. Second meeting with the students is conducted in the same semester to assess the effectiveness of the corrective action undertaken.

4. Short term Training Program

IoT is a giant, digitally connected universe of billions of physical devices around the world; "things" that collect and share data about how they're used and the environment around them. These objects are embedded with internet connectivity, software, sensors, and other hardware that enable them to connect and exchange data with other systems and devices over the web.

IoT extends the power of the internet beyond smartphones and computers to ordinary household objects such as lightbulbs, locks, smart microwaves, wearable fitness devices, sophisticated industrial tools, and self-driving cars, affording them a higher degree of analytical and computing capabilities.

IoT has many uses; however, it depends on key technologies and components to connect devices to the internet, such as:

- Sensors to collect the data from the environment for the IoT system to process it
- Connection and identification from the device to the IoT system through an IP address
- Actuators that allow the devices to take action based on data from their own sensors and network feedback
- IoT gateway to bridge data from the different devices to reach the cloud. It also translates the devices' protocols into one standard protocol and filters out unnecessary data from the devices.
- The cloud, where all data from the IoT devices is gathered and processed by software
- User interface, from where users get the data from the devices so that they can make the required commands that the devices need to execute

Automation ties all these components together and ensures that processes work smoothly without the involvement of a human being.

Due to this reason, the Short term training program (STTP) was organized by the Computer Engineering Department, VIVA Institute of Technology. The speaker was from Tech Cryptors, Mumbai.

STTP on Automation & Monitoring using IOT in Computer Engineering

The objective of the ISTE Approved STTP was

- To appraise the participants with the urgent need of IOT
- To help the participants practically understand components used in IOT and their calibration
- To provide hands-on training to demonstrate fundamental concepts of IoTs

The ISTE approved STTP was conducted from 30th June to 5th July, 2022 in VIVA Institute of Technology, Computer Engineering. The inauguration was attended by Principal Dr. Arun Kumar, Mr. Yadnesh Mohan Zagade.

Sr. No.	Date	Topics Covered
1	30th June 2022	Introduction to UOI & IOT, practically explored components, sensors, microcontrollers, Arduino Boards Hardware
2	1st July 2022	Coding for controlling Buzzer through Arduino, Motor driver & architecture of its hardware chip, IR Sensor, Calibration of IR Sensor with different components like LED, RGB, Motor, buzzer etc.
3	2nd July 2022	Pulse Width Modulation, Calibrating potentiometer with different components like LED, RGB, Motor, buzzer etc., Calibrating ESP 8266 with our Microcontroller by coding our own programs in C Embedded, structure of WiFi breakout board
4	4th July 2022	Interfacing our complete system with Internet using ESP 8266, Calibrating system with server-based app for reading real time sensor values on.
5	5th July 2022	Quiz
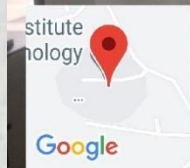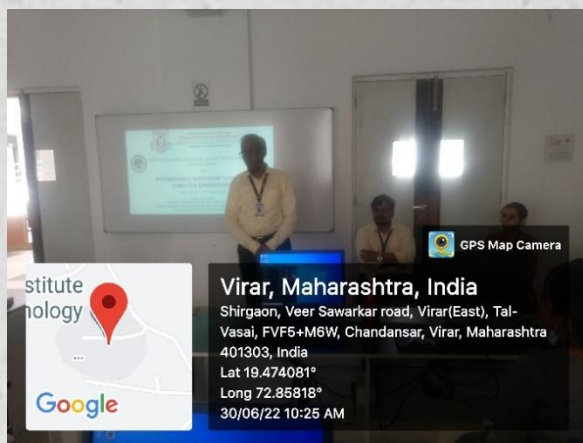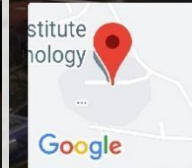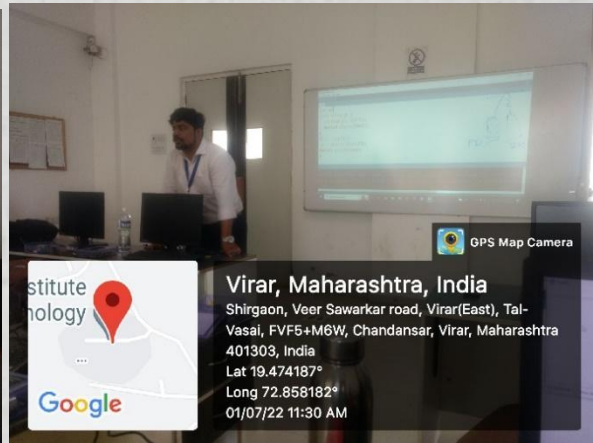
5. Parents Meet' 21-22

Introduction of Computer Engineering Department was given. Parents were introduced with departmental laboratories and facilities. They were made aware of different Department initiatives such as Mentor system, Meetings under mentor system, Cumulative attendance system & terms regarding Attendance. Syllabus of respective classes also Policies regarding K.T. and year drop for student, the Examination pattern, internal exams and university exam schedule and Weightage were discussed.

 College timing, ID card is compulsory in the college premises, Mobile phones are not allowed in college premises and Instructions regarding dress code were given. Placement Selection Process, Activities conducted for training the students, previous placement records. We plan industrial visits only for one day.

Parents were requested to Understand the structure of engineering course, Stay connected with mentors and other teachers, Communicate with students regularly regarding academic activities. Motivate students for participating in the co-curricular, extra-curricular activities. Staff members have interacted with parents to solve their doubts. Details were discussed.

Valuable suggestions were taken from parents. Curriculum feedback was taken from all the attendee parents. All the parents interacted with respective mentors and assessed their student's progress.

6. Technical Magazine

(HTTP://WWW.VIVA-TECHNOLOGY.ORG/NEW/TECH-NEXT)

A Biannual Technology Review Magazine

We live in a time where technology is an indispensable part of our everyday life. It is impossible to imagine our daily routines without these technologies, right from the coffee maker machine to the mobile devices to the computers; especially internet has become a necessity. And these technologies have undergone and undergo, changes and updations on a very frequent basis. For this reason a Technical magazine is like a holy book for the people who follow technology as a passion.

Steve Ballmer says "The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential."

Keeping this in mind the Computer Engineering Department, VIVA Institute of Technology published the first Technical Magazine in the institute called the 'TECH-NEXT: A Biannual Technology Review Magazine' to empower the Faculty and Students to be creative and productive; providing a platform to showcase their knowledge about the new technologies which are becoming or which will become an integrated part of our life, and help others to learn about these technologies.

TECH-NEXT is a Technology Review Magazine Published by Computer Engineering Department of VIVA Institute of Technology. The Magazine is published twice in a year. The Magazine was launched on 23rd September 2016 in the presence of Management members of VIVA Trust, Principal of VIVA Institute of Technology and staff members of Computer Engineering Department.

The department was also able to secure International Standard Serial Number (Online) for the technical magazine as well, **ISSN (Online): 2456-5105**.

Initiatives for Students and CSI

1. Technical Magazine

TECH-NEXT is a Technology Review Magazine Published by Computer Engineering Department of VIVA Institute of Technology. The Magazine is published twice in a year. The Magazine was launched on 5th October, 2018 in the presence of Management members of VIVA Trust, Principal of VIVA Institute of Technology and staff members of Computer Engineering Department. Having secured International Standard Serial Number (Online), **ISSN (Online): 2456-5105**, it provides a great platform for the students to share and acquire knowledge about the new technologies that are going to shape the future of the generation.

Students took great interest in this initiative and in the first issue of the second volume majority of the technical articles published were from the students. In the second volume more than 90% of the articles have been contributed by the students.

2. Poster Making (Monthly Event-1) – 10/02/2022

The CSI-VIVA successfully organized the event to celebrate National Science Day at the Computer Engineering Department, VIVA Institute of Technology. The event was conducted by CSI Members, and was attended by Computer Engineering students.

Students from the department shared their posters which were handmade and digital on the topic of "Integrated approach in science and technology for a sustainable future". Finally, everyone in the department enjoyed this event. There was a large participation from department students of S.E, T.E and B.E Computer Engineering.

Overall it was a Fun-Filled Event.

3. Webinar on Cloud Computing with Microsoft Azure- 26/08/2021

The CSI-VIVA successfully organized the event Webinar on Cloud Computing with Microsoft Azure at the Computer Engineering Department, VIVA Institute of Technology. The event was conducted by T.E Student MS. Priya Pathak, Ms. Mansi Patil who was very knowledgeable about Cloud Computing and Microsoft Azure and was attended by Computer Engineering students. The event was conducted to encourage students and to improve their technical and general knowledge on platforms used for Cloud Computing with Microsoft Azure.

They covered Microsoft Azure and Cloud Computing from the very basics, starting by explaining to the students, then handed a session on Azure, also covering various other elements such as Q&A session, Compute Models and Deployment Models. Finally, discussion on Microsoft Learn Student Ambassador Program with their journey towards MILSAP. There was a large participation from students of T.E and B.E Computer Engineering.
Overall it was an Informative event.

4. Webinar on Cyber Security- 05/10/2021

The CSI-VIVA successfully organized the Webinar on Cyber Security and Ethical Hacking at the Computer Engineering Department, VIVA Institute of Technology. The Webinar was conducted by CSI Members, who was very knowledgeable about the process involved in Cyber Security and Ethical Hacking and was attended by Computer Engineering students. The event was conducted to encourage students and to improve their technical and general knowledge on platforms used for Cyber Security and Ethical Hacking.

He covered all the points from the very basics, starting by explaining to the students, the complete need for Cyber Security, also covering various other elements such as Stages of Hacking, and the complete overview of Attack Vectors, Penetration Testing, along with teaching the implementation. Finally, discussions on Prevention from Cyber Attacks were done. There was a large participation from students of T.E and B.E Computer Engineering.
Overall it was an Informative Webinar.

5. Webinar on Basic GUI design using Java- 07/10/2021

The CSI-VIVA successfully organized the event Webinar on Basics of GUI Designing using Java at the Computer Engineering Department, VIVA Institute of Technology. The event was conducted by CSI Members, who were very knowledgeable about the process involved in Basics of GUI Designing using Java Development and was attended by Computer Engineering students. The event was conducted to encourage students and to improve their technical and general knowledge on platforms used for GUI Designing using Java Development.

They covered all the points from the very basics, starting by explaining to the students, the complete Interface of Java, also covering various other elements such as Fundamentals of OOPJ and other components, and the complete overview and use of NetBeans for Programming, while also explaining creating of GUI using jFrames and other components. Finally, discussions on the

Mini project for students were done. There was a large participation from students of S.E Computer Engineering.

Overall it was an Informative event.

6. Josh (Monthly Event)- 22/09/2021

The CSI-VIVA successfully organized the event to celebrate Teachers Day and Engineers Day at the Computer Engineering Department, VIVA Institute of Technology. The event was conducted by CSI Members, and was attended by Computer Engineering students. The event was conducted to acknowledge our teachers and also to encourage students to showcase their talents and share their achievements.

Students from the department shared their poetry, performances, achievements, photography, artworks, and also experience of Internships. Students placed with top packages from batch 2021 were also introduced and encouraged juniors. Also Teachers and Students were participated in games like "Let me Guess it" as well as "Jumbled Words". Finally, everyone in the department enjoyed this joyful event. There was a large participation from department staff and students of S.E, T.E and B.E Computer Engineering.

Overall it was a Fun-Filled Event.

7.Imperia – 31/03/2022

The CSI-VIVA successfully organized the event Imperia 2022 at the Computer Engineering Department, VIVA Institute of Technology. The event was conducted by CSI Members, and was attended by Computer Engineering students. The event was conducted for the students to share their technical knowledge with the Teachers, Guide and Students also to encourage students to showcase their talents and share their unique projects.

Students from the department shared their projects and gave presentation on it. Also Students from BE share their major projects. Finally, everyone in the department enjoyed this technical event. There was a large participation from department staff and students of S.E, T.E and B.E Computer Engineering.

Overall it was a knowledgeable Event

8.TechSpark 3.0 -06/04/2022

The CSI-VIVA successfully organized the event TechSpark 3.0 at the Computer Engineering Department, VIVA Institute of Technology. The event was conducted by CSI Members, and was attended by Computer Engineering students. The event was conducted for the students to share their technical knowledge on the technical papers with the Teachers, Guide and Students also to encourage students to showcase their presentation skill and share their unique paper on the topic.

Students from the department shared their papers and gave presentation on it. Finally, everyone in the department enjoyed this technical event. There was a large participation from department staff and students of S.E, T.E and B.E Computer Engineering.

Overall, it was a knowledgeable Event.

9.Internal Hackathon for Smart India Hackathon -25/03/2022

The MHRD, AICTE, Persistent systems, Innovation cell and I4c organized the "Smart India Hackathon- 2022", the world's largest hackathon in collaboration with private organization and industries for young aspiring youths of India to come up with outstanding solutions for the major problems of the nation.

SPOC of SIH 2022, we organized Campus Internal Hackathon 2022 in the campus of VIVA institute of technology, Shirgaon in offline mode. Total 12 teams from different departments of our college had participated in campus internal hackathon.

Panel of 3 experts from the respective industries to judge the solution structure given by all the teams. Experts had given their best efforts and experience to reach all the teams to their precise solution.

Evaluation criteria was based on some parameters like novelty of idea, complexity, clarity, feasibility and potential for future work progression. - At the end among the 12 teams 10 teams were shortlisted by the experts.

BE Projects 2021-22

Sr. No.	Guide Name	Project Title
1	Ashwini Save	• SnapSolve - A Novel Mathematics Equation Solver using Deep Learning. • Multi-layer authentication protocol system for security enhancement of administrative devices.
2	Pallavi Vartak	• Voice Based Taxi Booking System • Fraud Apps and Virus Detection System
3	Sunita Naik	• Real estate management system using blockchain • DRISHYAM : An Interpreter for Deaf and Mute
4	Janhavi Sangoi	• F-pay:-A Secure Approach For Payment • Resume Parser
5	Reshma Chaudhary	• Smart Interviews using AI • Pet Paradise
6	Umesh Mohite	• Intelligent surveillance system • Virtual assistant for Elderly people
7	Saniket Kudoo	• Virtual assistant for Elderly people • Wildfire prediction technique using machine learning.
8	Vinit Raut	• I VOTE: cloud based voting system with identity verification • Intelligent eye - smart assistant for visually impaired
9	Akshata Raut	• Try on: a virtual dressing room • Scorpion Sheild
10	Monali Pimple	• A distinctive multilingual messaging application with ocr • Virtual Mouse using Artificial Intelligence.
11	Bhavika Thakur	• Special Child Care App • Morse D-pad
12	Kirtida Naik	• Yoga Pose Detection using Machine Learning and Deep Learning • Digital room service • Crypto currency price prediction

Toppers

Academic Year 2021-22

BE

Rank	Student Name	CGPI/SGPI
1	LADE SHRUTI PRAMOD	8.32
2	WANKHEDE SHREYAS SUDHIR	8.08
3	DHUMAL AMRUTA SUNIL	7.98

TE

Rank	Student Name	CGPI/SGPI
1	CHAVAN KETAN	9.83
1	RAUT NEHA MAHESH	9.83
2	KAMBLE PRIYANKA	9.29
3	JAISWAL BRIJESHKUMAR	9.17

SE

Rank	Student Name	CGPI/SGPI
1	THAKUR RUCHA VIVEK	9.81
2	JOSHI KIRTI MANOJ	9.3
3	MOGAVEERA PRAJWAL MUTTHA	9.11

Placement Record 2021-22

SR NO.	NAME OF STUDENT	COMPANY	DESIGNATION	PACKAGE
1	Priyank Shah	Infosys	System Engineer	3.6 LPA
2	Nitiket Shinde	LTI, Capgemini, TCS, Ugam Solutions, Atos, Wipro	Graduate Engineer Trainee	5 LPA, 4 LPA, 3.8 LPA, 4 LPA, 3.8 LPA, 3.5 LPA
3	Deep Limbad	LTI,PERSISTENT, CAPGEMINI, UGAM, TCS,WIPRO	Graduate Engineer Trainee	6.5 LPA/3.5LPA,5 LPA,4.7 LPA,4 LPA, 4 LPA,3.5 LPA,3.36 LPA
4	Yash Prakash Pandhare	Evosis	Associate Consultant	3.60 LPA
5	Aditya Jitendra Bawa	UGAM,EVOSYS	Associate Software Engineer	4 LPA, 3.60 LPA.2 LPA
6	Yogeshwar Patil	Capgemini	Analyst	4 LPA
7	Siddhesh Rane	Wipro	Project Engineer	3.50 LPA
8	Devesh Patil	QualityKiosk Technologies Pvt. Ltd	Digital Quality Engineer(Grade:A3)	2.25 LPA
9	Hemil Patel	EVOSYS, Wipro	Associate Consultant, Project Engineer	3.60 LPA, 3.50 LPA
10	Mali Kamlesh Rameshkumar	Persistent	Software Engineer	4.71 LPA
11	Kumar Karan Kundanmal	LTI	Graduate Engineer Trainee	4 LPA
12	Mhetre Balaji Subhash	WIPRO		
13	Riddhima Chinchane	QualityKiosk Technologies Pvt. Ltd	Digital Quality Engineer (Grade:A3)	
14	Shweta Jha	TCS, Wipro , LTI, Capgemini	Project Engineer	3.50 LPA-4 LPA

15	Samiksha Sanjay Mobarkar	HEXAWARE TECHNOLOGIES	Graduate Engineer Trainee	4 LPA
16	Urval Chikhale	Wipro	Project Engineer	3.5 LPA
17	Gaurav Gupta	Capgemini	Software analyst	4 LPA
18	Hruchita Balu Jadhav	Infosys, Wipro	System Engineer, Project Engineer	3.60 LPA, 3.50 LPA
19	Gauresh Desai	CAPGEMINI, LTI, Atos syntel	Analyst, Graduate engineer trainee, Associate Consultant	4 LPA, 4 LPA, 3.4 LPA
20	Hritik Mahadik	Wipro	Project Engineer	3.5 LPA
21	Poonam Sanjay Bhagat	Wipro	Project Engineer	3.5 LPA
22	Rutuja Jadhav	Wipro, LTI	Project Engineer	3.5 LPA
23	Mayur Bote	Wipro, Ugam	Project Engineer	3.50 LPA
24	Divya Karwande	Pharma14	Associate Software Engineer	4 LPA
25	Prathmesh Naik	Swabhav Tech Labs	Data Analyst	4 LPA
26	Hussain Thanawala	Sankey Solutions,Capgemini	Trainee Programmer	3.50 LPA
27	Simran Thakur	EVOSYS,Nucsoft, Capgemini	Solution Analyst, Analyst	3.5 LPA
28	Piyush Yadav	Acty systems, LTI	Analyst	3. LPA
29	Hamid Samani	LTI	Graduate Engineer Trainee	3 LPA,4LPA
30	Darshan Naik	Swabhav Tech Labs	Project Engineer	3.6 LPA, 3.2 LPA, 4 LPA
31	Rahul Nair	Sankey,Capgemini	Trainee Programmer	3.8 LPA, 5 LPA
32	Sumit Samanta	TCS, Capgemini	Assistant System Engineer-Trainee, Analyst	3.5LPA
33	Abhishek Iswalkar	ASCENTECH VIRAR	Developer	3.5 LPA
34	Maitri Bhagat	ASCENTECH VIRAR	Developer	3 LPA,4LPA
35	Aditi Santosh More	ASCENTECH VIRAR	Developer	3.36 LPA,4 LPA
36	Deveshree Vijay Kadu	ASCENTECH VIRAR	Tester	3LPA
37	Ashwani Tiwari	ASCENTECH VIRAR	Developer	3LPA

Recent Publications by Students in AY: 2021-22

Sr. No	Author 1	Author 2	Author 3	Author 4	Paper Title	Published / Presented
1	Poonam Bhagat	Rutuja Jadhav	Mayur Bote	Prof. Akshata Raut	Try On:A Virtual Dressing Room	IJSART
2	Anant Prajapati	Prathmesh Medhekar	Tanushka Padelkar		Virtual Mouse using Artificial Intelligence	National Conference on Role of engineers in Nation building 2022
3	Kamlesh Mali	Karan Kumar	Balaji Mhetre	Janhavi Sangoi	FR-PAY-A secure approach for payment	10th National Conference on Role of Engineers in Nation Building – 2022
4	Kamlesh Mali	Karan Kumar	Balaji Mhetre	Janhavi Sangoi	FR-Pay :- A Secure Approach for Payment	NCRENB
5	Hruchita Jadhav	Deveshree Kadu	Yugali Patil		Pet Paradise - A vet care application	NCRENB

6	Atharv Kadam	Himanshu Dhande	Divya Karwande	Akshata Raut	Scorpion shield	IJSART
7	Rahul Patil	Prathamesh Parab	Vilas Rathod	Prof.Vinit Raut	Intelligent Eye - App for Visually Impaired Peoples	National Conference on Role of Engineering in Nation Building - 2022
8	Rahul Patil	Prathamesh Parab	Vilas Rathod	Prof.Vinit Raut	Intelligent eye-visually impaired people	National Conference on Role of Engineers in Nation Building – 2022
9	Aditya Sule	Ashwani Tiwari	Rahul Yadav	Kirtida Naik	Crypto Currency Price Prediction System	IJSART
10	Aditya Sule	Ashwani Tiwari	Rahul Yadav	Kirtida Naik	A Review Of Machine Learning Algorithm for Crypto Currency Price Prediction	NCRENB
11	Dishant Prashant Save	--	--	--	Big Data and Types	Technical Paper Presentation

12	Samiksha Mobarkar	Aditi More	Siddhita Salunke	Prof. Reshma Chaudhary	Smart Interviews Using AI	INTERNATIONAL JOURNAL OF CURRENT ENGINEERING AND SCIENTIFIC RESEARCH (IJCESR)
13	Yash Pandhare	Pawan Pujari	Aditya Bawa	Prof. Ashwini Save	A Secure Authentication Protocol for Enterprise Administrative Devices	ICACCS 2022
14	Aryan raut	Deven Randive	Yash Vishwas Patil	--	Nurochip	IEEE
15	Chirag P Patil	Devesh Patil	Shubham Kore	Prof.Sunita Naik	Blockchain based Real Estate Management System	NCRENB 2022
16	Amit Munna Gupta	Suyash Sagar Koltharkar	Hemil Deepak Patel	--	DRISHYAM : An Interpreter for Deaf and Mute	International Conference on Advanced Computing and Communication Systems
17	Atharv Kadam	Himanshu Dhande	Divya Karwande	Prof. Akshata Raut	SCORPION SHIELD	International journal for science and advance research in technology
18	Yash Pandhare	Pawan Pujari	Aditya Bawa	Prof. Ashwini Save	A Secure Authentication Protocol for Enterprise Administrative Devices.	ICACCS

19	Yash Pandhare	Pawan Pujari	Aditya Bawa	Prof. Ashwini Save	A review on the protocol systems for security enhancement of administrative devices.	NCRENB-2022
20	Abhishek Iswalkar	Sagar Gorle	Govindnarayanan Dubey	Prof.Pallavi Raut	Fraud Apps and Virus Detection System	International Journal for Science and Advance Research in Technology (IJSART)
21	Gauresh Desai	Rahul tambat	Hritik Mahadik	Prof. Vinit Raut	Experimental research on cloud based online voting system	IJSART journal
22	Prathamesh Santosh Naik	Mansi Deepak Dhuri	Yukta Sanjeev Bharankar	Prof. Bhavika Thakur	Special Child Care App	NCRENB-2022
23	Poonam Bhagat	Rutuja Jadhav	Mayur Bote	Prof. Akshata Raut	TRY ON: A VIRTUAL DRESSING ROOM	International Journal for Science and Advance Research in Technology (IJSART)
24	Maitri Bhagat	Shweta Jha	Riddhima Chinchane	--	Resume Ranking	NCRENB-2022
25	Urval chickale	Gaurav Gupta	Raj Gupta	Prof Umesh mohite	Virtual assistant for elderly people	International Journal for Science and Advance Research In Technology

26	Aditi S. More	Samiksha S. Mobarkar	Siddhita S. Salunke	Prof. Reshma R. Chaudhari	Smart Interviews Using AI	International Journal Of Current Engineering And Scientific Research (IJCESR)
27	Rithik Kharatmol	Sanket Ingale	Ritesh Vaishya		Smart Surveillance System	International Journal for Science and Advance Research in Technology
28	Darshan Naik	Rahul Nair	Sumit Samanta	--	New era of virtual dressing based on deep learning	NCRENB 2022
29	Aditi S. More	Samiksha S. Mobarkar	Siddhita S. Salunke	Prof. Reshma R. Chaudhari	Smart Interviews using AI	NCRENB 2022
30	Piyush Yadav	Tarun Thanvi	Hamid Samani	Prof. Kirtida Naik	Yoga pose detection using Machine Learning	International Journal for Science and Advance Research In Technology

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