



### Vision of the Department

To be recognized as a center of Excellence in the field of Electronics and Telecommunication Engineering where learners are nurtured in a scholarly environment to evolve into competent professionals to benefit society.

### Mission of the Department

1. Evolve a curriculum which emphasizes on strong engineering fundamentals with the flexibility to choose advanced courses of interest and gain exposure to tools and techniques in Electronics and Telecommunication Engineering.
2. Encourage a teaching-learning process in which highly competent faculty share a symbiotic association with the institutes of repute.
3. Facilitate creation and dissemination of Electronics and Telecommunication knowledge through a digitally-enabled learning environment.
4. Develop academic and infrastructural facilities with modern equipment and other learning resources and encourage reciprocal sharing with other institutes through networking.
5. Establish a centre of excellence to enhance academia – Electronics and Telecommunication industry partnership and work on collaborative projects.

### Programme Educational Objectives (PEO)

1. Graduates will be able to apply Electronics and Telecommunication knowledge to design technically sound systems, adopt new technologies through lifelong learning and to lead a successful career in diverse domains and streams.
2. Graduates will be able to show ability of Research and Development and Entrepreneurship skills.
3. Graduates will be able to exhibit professionalism, ethics, team work and social awareness in their career.

## WHAT'S INSIDE

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Topic of the Quarter

## DR. ARPIT RAWANKAR

**HEAD OF DEPARTMENT  
ELECTRONICS AND TELECOMMUNICATION ENGINEERING**

Hello Everyone,

A warm welcome to all readers

Firstly, I would like to thank Management of Vidyalankar Institute of Technology for giving me the opportunity to lead Electronics and Telecommunication Department. I would also like to extend my thanks to Dr.Sanjay Singh Thakur Ex-HOD of the Department for his guidance and motivation towards me to take leadership role. I feel privileged to have a team of dynamic faculty members. Also, I am happy to teach as well as learn a lot from my highly intelligent students.

In this Quarter, Department successfully completed Academic and Administration work for the Even sem 2022. Department had organized guest lectures, workshops, project reviews. Also the final examination for SE,TE and BE students was held properly. Our faculty members also had offered internship programs for skill upgradation.

I welcome all students to the campus for start of new semester. I wish all my students a great luck



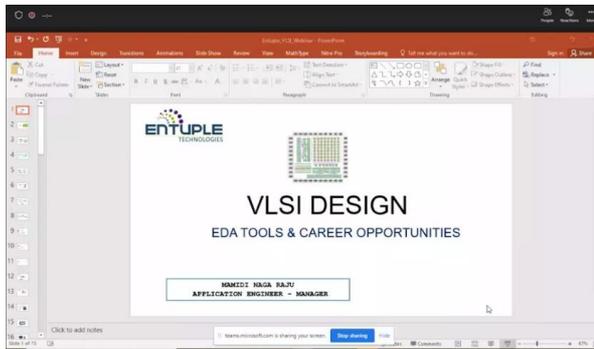


“Patents need inventors more than inventors need patents”

— Kalyan C. Kankanala



## A Guest lecture on VLSI Design



DATE: April 9, 2022

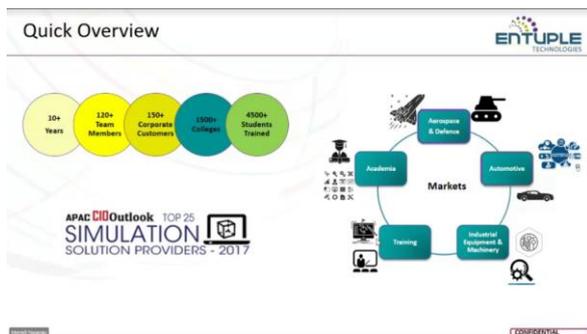
Speakers: Mr.Mamidi Nagaraju

Name of the Committee: IETE

Activity Title: Introduction to EDA Tools and Career opportunities in VLSI

The objective of the event was to learn about the functioning, execution, and overall software of various EDA Tools, design system engineering software for applications to design hardware and data insights along with learning viable career prospects provided by the domain of VLSI. The guest lecturer Mr. Mamidi Nagaraju was invited for the workshop and the details and itinerary of the event were coordinated along with the necessities for the event.

The event began with the wise words of the Head of Department Prof. Dr. Sanjay Singh Thakur as he addressed the audience and stressed the need of the knowledge obtained from seminar. It was later followed by the welcoming of the guest speaker Mr. Mamidi Nagaraju by the event head Aditya Agashe.



Participants got acclimatized with the setup, control, functions, execution, and core concepts which would enhance their projects & elevate their significance.

## Department Staff

PROF.SWAPNIL ASHTEKAR  
ASSISTANT PROFESSOR



**EDUCATION QUALIFICATION:**  
ME EXTC

**WORKING EXPERIENCE:**  
11 YEARS

**AREA OF SPECIALIZATION:**  
Signals and Systems, Computer Communication Networks, Random Signal Analysis, Antenna design

Dr. ARPIT RAWANKAR  
PROFESSOR



**EDUCATION QUALIFICATION:**  
PhD(Laser and Fiber optics)  
Post Doc (Control Systems)

**WORKING EXPERIENCE:**  
6 Years in Research  
6Years in Academia

**AREA OF SPECIALIZATION:**  
Control Systems, Optical fiber communications,  
Virtual Instrumentation, Photonics

“Tell me and I forget. Teach me and I remember. Involve me  
and I learn.  
- Benjamin Franklin”

## Student's Speak

### Yashika Devadiga BE Div B

Being a Vitian has been a wonderful experience. Here I've learned that success is a journey, not a destination, and VIT consistently makes the process fascinating.

It feels like yesterday even though our cohort, who had enrolled as freshmen back in 2019, will resume physical college as final-year students. However, even though we have been attending college online for the past two years due to the pandemic, the memories we made as freshmen still seem so vivid. Even during the online phase, sufficient resources were provided, such as granting access to platforms like Coursera and Edx, so that we could make use of the time by learning something new. Professors are very proactive and supportive in imparting knowledge and skills to their students.

Along with academics, a variety of campus activities enabled me to hone my skills and grow as a person. Many committees gave me the chance to meet professionals and gain valuable industrial insights through various seminars hosted by them. Apart from excellent academic experience, I also gained the benefits of being a part of the technical Student body. The college frequently holds competitions and workshops to aid students in developing new abilities. Throughout my journey at VIT, I have been encouraged to participate in extra-curricular activities and widen my horizons beyond the academic curriculum. The college has moulded my personality and clarified my vision of the future.



## Faculty Achievements

### Achievements of Dr. Saurabh Mehta :

1. Appointed as External examiner for phd candidates at Rajiv Gandhi Institute of Technology, Mumbai
2. Contributed as a Reviewer in the second international conference on automation, computing and communication which was conducted virtually on April 7-8, 2022. The conference was organized by Ramrao Adik Institute of Technology, DY Patil Deemed to be University, Navi Mumbai, India.
3. Participated in the 7 days National Level Virtuality Faculty Development Program on "BIG DATAANALYTICS AND MACHINE LEARNING" Conducted by the Department of Information Science and Engineering, East Point College of Engineering and Technology, Bengaluru-49 from 26<sup>th</sup> March to 1<sup>st</sup> April 2022.
4. 2 STEM projects completed under funding from IEEE Bombay section and 2copyrights are granted in software category.
5. Lecture delivered as a keynote speaker on " WBAN: Wearable health care solution for elderly/Sports person," April end, Biomedical, Electronics and Devices conference, UK.
6. PR.Bapat outstanding volunteer award for the year 2021, IEEE Bombay section.
7. Received a fellowship to complete IEEE Professional course.

### Achievements of Vaibhav Kshirsagar:

Prof. Vaibhav Kshirsagar successfully completed his internship in Industrial Engineering Quality Control and Statistical Process Analysis at 'Moraya Packaging Private Limited, Navalakh Umbre MIDC Talegaon. Pune from 15<sup>th</sup> June 2022 to 20<sup>th</sup> June 2022. He worked on case studies of Variance estimation and analysis of GSM and BF properties of paper for raw material inspection and procurement operations, analysis of paper RCT and process control and factor screening solution for load bearing capacity of Boxes. These case studies were aimed at the determination of overall quality of the end products of our industry.



Education is the passport to the future, for tomorrow belongs to those who prepare for it today. —Malcolm X



## Know an Alumna

Akanksha Samel Batch 2021

“Enjoy the little things, for one day you may look back and realize they were the big things”

- Robert Brault

With profound love, I would like to thank VIT for what I am today. The teaching and non teaching staff have always strived hard to mould us. Even in the amidst of COVID -19 VIT stood for us to get the best placements. Words are less to describe gratitude towards VIT like it is always less to appreciate the beauty of gem. I wish I could go back to those 4 years where life was best in VIT. Truly VIT has been the best turning point of my life. VIT is one of the best places to form strong relationships that will last far beyond just 4 years. VIT is a family for me and I am glad to be a part of it.



Akanksha Samel  
Senior Analyst-Cyber Security  
Nangia & CO LLP

## Students Achievement in sports

Following EXTC students were part of VIT's Girl's volleyball winning team in a competition held at KJ Somaia College :

1. Kanishka Gupta TE Div B
2. Neha Kumari TE Div B
3. Namita Nagude Captain BE Div B
4. Samidha Gurav BE Div B
5. Bhavika Pawar SE Div A
6. Prutha Girkar FE Div B



Title : Winning Team of VIT. They Fought against SNDT and VITI

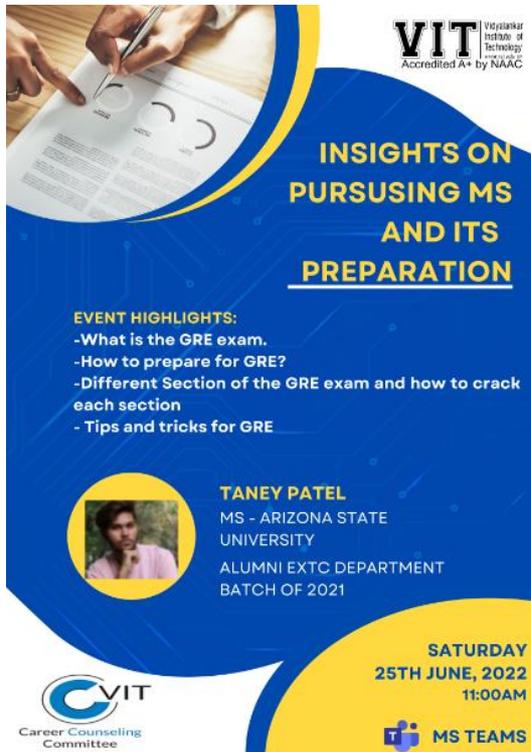


Security used to be an inconvenience sometimes, but  
now it's a necessity all the time.

-Martina Navratilova



## Career Counselling Committee and ETSA Conducted a Webinar on 'Insights on Pursuing MS and its Preparation'



DATE: June 25<sup>th</sup>, 2022

SPEAKER: Mr.Taney Patel

Career Counselling Committee: Prof.Avinash Shrivastava

ETSA: Prof.Swapnil Ashtekar

Target Audience: Final year students of the Vidyalandkar Institute of Technology

Objective: The objective of the event was to make students aware of GRE Exam preparation for MS. The speaker elaborated on the routine which students should follow for GRE Preparation. He shared his way of studying difficult sections from GRE Syllabus. He encouraged students to prepare timeline to crack GRE Examination. He also briefed on Top Engineering Institutions in US.

The session concluded with Question Answer round through Student-Speaker Interaction.

Takeaway: Attendees got insights on

- GRE Exam
- Planning on pursuing MS
- About GRE Preparation

### Upcoming Conferences:

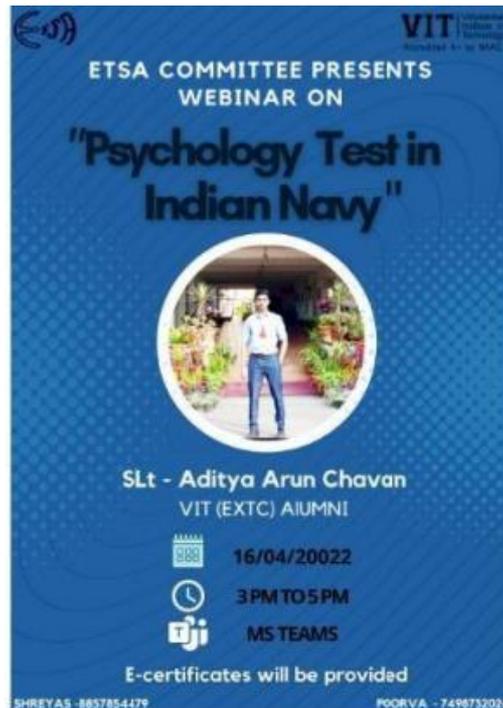
- o International conference on Signal and Information processing at College of Engineering pune on 25<sup>th</sup> and 27<sup>th</sup> August 2022.
- o IFAC International Symposium on Automatic control in Aerospace at Victor Menezes Convention Centre, IIT Mumbai on 21<sup>st</sup> to 25<sup>th</sup> November 2022.
- o International conference on Traffic and Granular flow at IIT Delhi on 15<sup>th</sup> to 17<sup>th</sup> October 2022.
- o International Conference on Analysis, Inverse problems and applications at IIT Chennai on July 18<sup>th</sup> to 21<sup>st</sup> July 2022.



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## Electronics and Telecommunication students' association ETSA Conducted a Webinar on “Psychology test in Indian Navy”



Date:: April 16<sup>th</sup>, 2022

Speaker SlT-Aditya Arun Chavan

ETSA Incharge: : Prof.Swapnil Ashtekar

Target Audience: SE and TE Students

Objective: To brief students on Psychology test in Navy.

Details: The event was publicized amongst the SE and TE students through various online platforms. A great response from the students was anticipated and the event was conducted in a duly manner. All the participants were given reminder mails in which link for joining the team was included .

The webinar began sharp at 3:00 pm with our guest speaker for the day,who was also an alumnus of our institution SlT. Aditya Arun Chavan , the webinar started by his introduction and his interest in the Indian Navy followed by which he explained the procedure on psychology tests which is a part of SSB interview .

The guest speaker explained everything in brief right from the interview process to the eligibility all topics about the psychology sessions in SSB. After every part of explanation, the panel was open to the student audience to ask question and the session concluded by 5 pm with speaker thanking Prof Swapnil Ashtekar the convenor and the institution for their contribution in his successful career.

“

Security used to be an inconvenience sometimes, but now it's a necessity all the time.

-Martina Navratilova

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## MIT News

### ROBOT Overcomes Uncertainty to retrieve buried objects



Fadel Adib, associate professor in the Department of Electrical Engineering and Computer Science and director of the Signal Kinetics group in the MIT Media Lab (far left) with (from left to right) Tara Boroushaki, Nazish Naeem, and Laura Dodds, research assistants in the Signal Kinetics group.

Credits:

Image: James Day, MIT Media Lab

MIT researchers previously demonstrated a robotic arm that combines visual information and radio frequency (RF) signals to find hidden objects that were tagged with RFID tags (which reflect signals sent by an antenna). Building off that work, they have now developed a new system that can efficiently retrieve any object buried in a pile. As long as some items in the pile have RFID tags, the target item does not need to be tagged for the system to recover it.

“What this paper shows, for the first time, is that the mere presence of an RFID-tagged item in the environment makes it much easier for you to achieve other tasks in a more efficient manner. We were able to do this because we added multimodal reasoning to the system — FuseBot can reason about both vision and RF to understand a pile of items,” adds Adib.

“

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-Martina Navratilova

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## Topic of the Quarter

**Smart Textiles sense how their users are moving.**

**Researchers develop a comfortable, form fitting fabric that recognizes its wearer's activities like walking, running, and jumping**



Using a novel fabrication process, MIT researchers have produced smart textiles that snugly conform to the body so they can sense the wearer's posture and motions.

By incorporating a special type of plastic yarn and using heat to slightly melt it — a process called thermoforming — the researchers were able to greatly improve the precision of pressure sensors woven into multilayered knit textiles, which they call 3DKnITS.

They used this process to create a “smart” shoe and mat, and then built a hardware and software system to measure and interpret data from the pressure sensors in real time. The machine-learning system predicted motions and yoga poses performed by an individual standing on the smart textile mat with about 99 percent accuracy.

Link:<https://news.mit.edu/2022/smart-textiles-sense-movement-0707>

## THE Editorial Team

PROF. AMEY REVANDKAR

Chief Editor