



IEEE APSIT
Student Branch

We proudly present the Issue #1 : July 2020 - Newsletter



FAANG Interview
Interviews with
FAANG employees!
Page 7

Stay Alert
↓
**Control
the Virus**

Articles
Check out our
exciting articles
and send us your
articles!
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A message from our **Branch Counsellor**



CONTACT US !!!

Mail us your articles, queries, suggestions or questions and get a chance to be featured in the next issue!

Email : ieeeapsit@gmail.com

Instagram : [ieeeapsit](#)

DR. UTTAM KOLEKAR



It gives me immense pleasure to inaugurate the IEEE A P Shah Institute of Technology (APSIT) Branch's Newsletter. This newsletter highlights IEEE mission - "**To foster technological innovation and excellence for the benefit of humanity.**"

This initiative is started to celebrate the achievements of our Student Branch and its members. We take immense pride in being one of the most proactive branch under IEEE Bombay Section despite being just under a year old. We routinely conduct at least over 4 events every month drawing in huge crowds and many distinguished speakers and mentors from different walks of life.

This newsletter is a testament to the hard work and dedication of my precious student members.

We always had couple of IEEE members in our college. But in November 2019 we got a group of highly dedicated student volunteers who came together to form our IEEE APSIT Student Branch.

These volunteers working smartly, ***within a short span of 2 months managed to grow our IEEE APSIT family from just 15 members in November 2019 to over 45 members in February 2020.***

We later went on to organise grand events inviting renowned personalities like Hussain Mahdi (IEEE Region 10 Young Professionals South-East Asia Coordinator & IEEE R 10 Humanitarian Technology Activities committee), Ajinkya Kolhe (Machine Learning instructor at Google) and Nakul Agrawal (Poet, Yogi, Dancer, TedXSpeaker).

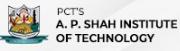
I applaud and commend the constant efforts of my team, especially the Editorial team behind this newsletter and envision great success in our future endeavours.

EVENTS

Past Events

The past month and a half saw IEEE APSIT SB going full throttle, taking advantage of spare time in lockdown

TALKDOWN IN LOCKDOWN



Meet Our Speakers



Raj Pritam Bhattacharya
Software Developer at Amazon

Faiz Malkhani
Design Lead at Agrahya

Nikhil R Karande
Cryptotrader,
Blockchain Enthusiast

Chirag Nayyar
Techno Commercial
Multi-Cloud Certified

Nakul Agarwal
TedX Speaker, Yogi,
Founder of Renovatio Foundation



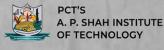
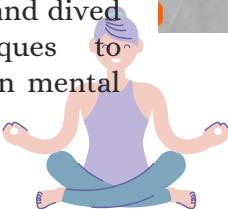
An ambitious 5-day webinar series featuring four technical topics and one non-technical topic. Speakers included highly qualified professionals such as Mr Nikhil Karande speaking on Blockchain, Mr Raj Pratim Bhattacharya speaking on Distributed Systems and Data Science, Mr Nakul Agarwal on Freeing yourself from stress and boredom in lockdown, Mr Chirag Nayyar on Start your Cloud journey with AWS Cloud and Mr Faiz Malkani on Design Thinking.

AWAKENING INTO NEW REALITY

A self care webinar to manage the lockdown blues conducted by two Art Of Living volunteers, Mr Rahul Kolangde and Mr Arpit Kothari.

Webinar revolved around the consensus of focusing on mental health in these dire times.

Speakers stressed on the importance of mental health over physical health and dived into many techniques to improve and maintain mental health.



11 MAY

5 PM

AWAKENING TO NEW REALITY

Rahul Kolangde
Corporate Banker
Volunteer and Teacher at
Art of Living organization

Arpit Kothari
IT Professional
Teaches youth empowerment skills
Certified Yoga Trainer

<https://bit.ly/ieeeapsit-anr>

Ask APSIT

Q. 1. What is included in my membership?

Ans : The most complete list of member benefits can be found at www.ieee.org/myieee. The list will distinguish benefits that come with your membership at no additional cost, as well as add-on products and services. Society benefits vary.

Q. 2. How do I gain access to the IEEE Job Site?

Ans : Log into myIEEE. Select the tab, “Profession Desktop.” Navigation to the IEEE Job Site will be presented in the left navigation bar.

Q.3 What is IEEE Access?

Ans : IEEE Access is a multidisciplinary, open access, applications-oriented, all-electronic archival journal that presents the results of original research or development across all of IEEE



CONTACT US !!!

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Instagram : [ieeeapsit](#)

Ask APSIT

Q 4. How to publish a paper in IEEE conferences?

Ans : You have to write a technical paper on any technical project topic or concept in IEEE format (given on conference website). You should read conference papers, journal papers and technical articles related to your topic for a better clarity of the solutions, knowledge of the variations in the technology and for citation as references. After Proofreading and Plagiarism check, you have to submit your manuscript to a Conference listed under Upcoming Conferences on IEEE Website. The Acceptance rate of every conference differs. If selected after review by experts, you have to resubmit the Camera Ready Copy (Final Submission) along with Registration fee and IEEE Copyright form. After Presenting, your paper would be forwarded to IEEE for publishing in the IEEE Xplore digital library.



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EVENTS

INNOVATING AGAINST COVID - 19

PCT'S
A. P. SHAH INSTITUTE
OF TECHNOLOGY

IEEE APSIT
Student Branch

A TALK WITH
WARRIOR

Indranil Chandra
An Innovator, Maker Engineer, Researcher & Aspiring Social Entrepreneur, will be talking with us about the making and distribution of M19 face shields that he has been contributing in.

12TH MAY, 5 PM
CATCH US LIVE ON INSTAGRAM
@/ieee_apsit

An interview with Mr Indranil Chandra of the M-19 Collective, a group of highly motivated individuals making face shields.

Very inspiring initiative taken by Mr Chandra, who despite being an expert on Deep Learning on the Edge has selflessly dedicated his life to ensure safety of all the workers and doctors who have to work in high risk conditions and we applaud him for his contributions.

Among other points discussed were this initiative of his group and the lessons he's learnt along the way and the road ahead.

INAUGURATION OF IEEE APSIT PES CHAPTER

A grand inauguration ceremony which saw Dr Hussain Mahdi giving detailed information about IEEE and PES, and Mr Ajit Singh Jadon presenting on battery management system in electric vehicles.

The ceremony set a new benchmark for IEEE APSIT in terms of registrations and number of participants.

PCT'S
A. P. SHAH INSTITUTE
OF TECHNOLOGY

IEEE APSIT
Student Branch

BATTERY MANAGEMENT IN ELECTRIC VEHICLES

SPEAKER

ER. A.S.JADON

CHIEF GUEST

HUSSAIN MAHDI

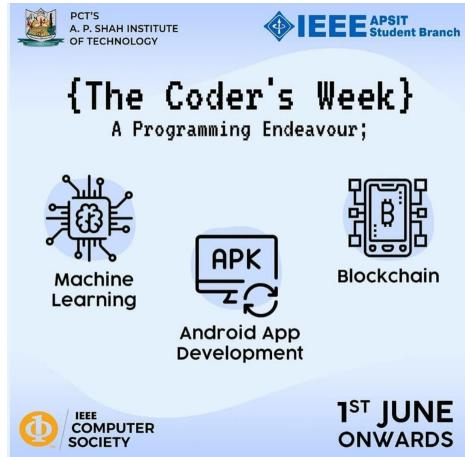
REGISTRATION LINK :<https://bit.ly/Batterymanagement>

IEEE PES
Power & Energy Society
APSIT STUDENT BRANCH CHAPTER

30TH MAY | 6:30 P.M

EVENTS

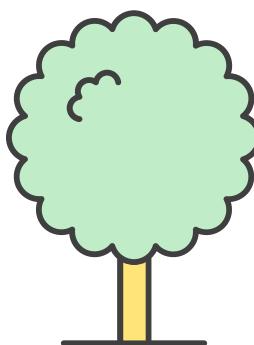
CODER'S WEEK



Week long training in dire lockdown conditions to enhance industry level practical knowledge and then partaking in real time projects under the guidance of IEEE Young Professionals to further deepen understanding in fields like ML, Blockchain and Android App Development.

INNOVATING FOR A BETTER WORLD

An innovation challenge organised by our PES team on the occasion of World Environment Day, 5th June. Participants will have to give a solution for any one of three problems, each with a different topic but related to environment.



Local Heroes



NSS APSIT Unit Organises Mask Donation Drive

Over the course of just one week, from 23rd to 30th May, NSS APSIT Unit volunteers and a few other students achieved the incredible feat of sewing 800 cloth masks at home!

The masks were delivered to the homes of the volunteers helping in food camps, etc following all safety precautions. By the end of the week these masks were donated to Kasarvadavli Police Station, Mumbai and the traffic police at Waghbil Naka by our principal Dr Uttam Kolekar.



CONTACT US !!!

Are you deeply involved in helping your local community or know anyone who does?

Get a chance to have your work published in our newsletter!

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Local Heroes



NSS APSIT Unit Organises Mask Donation Drive

Our Dean of Academics Prof Atul Deshpande provided valuable guidance. Our Dean of Administration Dr Sameer Nanivadekar and our Training and Placement Officer Mr Faizal Khan. NSS APSIT Unit headed by Cdt. Swarad Hajarnis and many other members and volunteers have contributed largely to our local community.

They are a source of inspiration and we applaud their constant efforts to give back to the society.



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EVENTS

WOMEN IN LEAD

A famous quote states that - "Woman must not accept; she must challenge."

WIE arms women with resources and opportunities to face these challenges.

Thus our WIE team brings you a webinar series in third week of June, focusing on IEEE WIE scholarships, awards, and entrepreneurial achievements of women.

WOMEN IN LEAD



Women in Lead is a webinar series organised by our WIE team in third week of June, focusing on IEEE WIE scholarships, awards, and entrepreneurial achievements of women.

15TH-17TH
JUNE, 2020



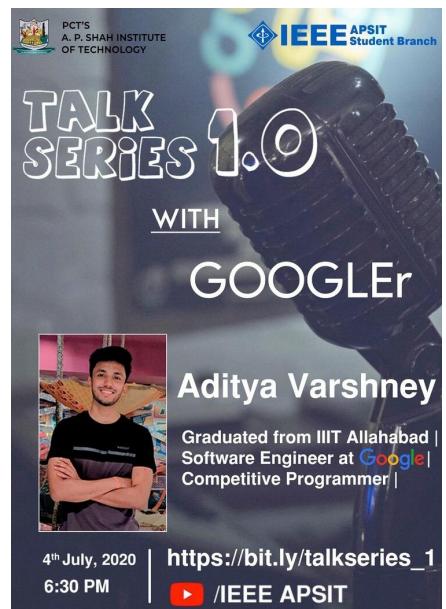
Upcoming Events

We have carried forward our momentum from past events to indulge you into exhilarating future events

TalkSeries 1.0



We take a dive into the lives of FAANG (Facebook, Apple, Amazon, Netflix, Google) and similar industry's employees to better understand how exactly are their jobs different from some XYZ company and why is everyone dying to land a job here! The first interview of this series features Mr Aditya Varshney from Google! Need we say anything more?



Local Heroes

Youth Saviours For The Poor From Vasai

Covid-19 and the subsequent lockdown saw a lot of hardships, as well as a lot of ordinary citizens turning up to combat those hardships. Vasai Sun City is one of the hardest hit areas. Raj Seth and his team Meet, Nisarg, Dharmik, Arpit, Henal, Nitisha, Abhi, Yash, Karan and Apurva worked tirelessly throughout the month of May. They provided food and water to the poor and the migrant labourers passing through their area.

A total of 2 lakh rupees, which were sourced from Atlanta and Canada apart from India, were used feed 10,000 people. More than 7200 water bottles were distributed, along with 1250 packets of biscuits per day. Food including bananas, theplas, biryani, kheer, rice and buttermilk was also distributed.



Our Pride

Our chests are puffed with pride as we present to you the members from our IEEE APSIT family who went the extra mile to achieve great success outside their duties in the branch



UTKARSH NAIK

Ex - Technical Lead at our Student Branch
Author of 2 IEEE papers.
Won the Best Paper Award at International Conference on Emerging Trends in Information Technology (IC-ETITE '20), Vellore Institute of Technology, Tamil Nadu



YASH SAMPAT

Computer Society Vice Chair at our Student Branch
Appointed as the Campus Ambassador for IEEE Xtreme Programming Competition 14.0



RAKSHIT SHAH

Technical Team Lead at our Student Branch
Appointed as a IEEE Bombay Section Students and Young Professional Activities Committee Member 2020



TensorFlow: The Ultimate Machine Learning Library.

In this world of raising Self driving cars and intelligent robots we think how we can get started and make one of those amazing robots we see in the movies. If you are also wondering the same then you can get started right way using awesome frameworks like TensorFlow and make awesome projects, but not those like movies as they are still fantasies even by the Senior AI Scientists.

What is TensorFlow? It's one of the most popular open source frameworks for doing Machine Learning and Deep Learning used by many companies and major researchers. Why the name TensorFlow? As a Student in 8th grade you learned about these pretty simple maths concepts like Scalar, Vector and Matrix but not Tensor. Confused What's a Tensor? Let me explain; A single number like 5 or 6 is scalar in nature, Let's say we have a group of numbers [3,4,5] or [7,8,9] is called as Vector and [[1,2,3],[4,5,6], [7,8,9]] is a Matrix or a Table and now anything above these dimensions are referred as Tensors and the movement of these n-dimensional array in Graphs is referred as Flow hence TensorFlow.

TensorFlow combines modules from preprocessing to training to deployment. Modules like TFLite make it possible for models to run on Edge Devices like Mobile phones and Micro controllers. TF.js enables users to work with ML in the browser. TensorFlow Hub is a collection of state of Art Models which can be used by others for re usability like Transfer Learning.

Machine Learning Frameworks like TensorFlow enables users like us to bring our Ideas to Life in an easy way and deploy them so that it can be used by millions of users.



AUTHOR:
ALI
MUSTUFA
SHAIKH

My Experience at an IEEE Conference

'Why to spend time on writing a research paper rather than start coding?' This was the first question in my mind when we were encouraged to write a research paper for our final year project even before the commencement of final year. IEEE conferences are considered to be among the prestigious conferences to present your research work which would be eventually published in IEEE Xplore.

We (project group members) were initially facing difficulties and complications due to lack of experience in writing a research paper along with our lack of interest. But after reading around 6 IEEE papers related to our project, we had a fair idea on writing a research paper. Being exposed to the innovations, methodology and the variations in similar areas as our project, we were able to bring a lot of changes in our thought process and the overall idea of our project. With active support from our project guides, we were able to write a decent research paper. Our research work of more than 3 months was rejected by the first IEEE Conference we applied to. Though it was a setback, we carefully proofread our own research paper and figured out the likely causes of rejection. The paper was updated accordingly before submitting the same to another conference.

We were one of the 4 project groups of our college whose paper was selected for presenting at IEEE International Conference on Emerging Trends in Information Technology 2020 (IC-ETITE'20) which was to be held at Vellore Institute of Technology (VIT), Tamil Nadu in February 2020. I volunteered to present the paper on behalf of my group. Our college supported us by reimbursing the conference fees. Travelling and attending an international conference in another state among a community of students, academicians and professionals actively involved in research was a new experience for all of us. We had the opportunity of networking with people of various backgrounds, domains and skill sets. The conference wasn't just technical and also included a cultural night.

My presentation was on Day 2. While I was clear on what points to speak, there were some nervous moments before and during my 8 minutes presentation. Fortunately, I was able to answer the couple of tricky questions asked by the judges, who were PhD faculties of VIT and other colleges. For a student like me who had stage fright, it was an amazing experience to present in front of such experienced judges and an audience of research orientated participants. The research papers presented by other participants in my track were equally interesting and innovative. After all sessions of the conference were completed, the list of best papers was announced and to my amazement, my name was in the list. Our group along with another from our college were among those who received the Best Paper Award in our very first presentation. This was only possible due to our efforts in researching, writing the paper and believing in ourselves even after the first rejection. As of May 2020, we are authors of 2 IEEE papers on IEEE Xplore. This experience of research also had a significant impact on my overall technical skills, confidence and problem solving techniques. I would like to encourage readers like you to give a try in writing a technical research paper.



Salesforce Community

We, the students of APSIT have introduced a Salesforce Community in college for the students to learn the latest technology that helps transform your ideas into applications in no time : Salesforce. From tech giants like Google and Facebook to our nearby call centre, all of them use Salesforce services and products to solve their problems.

As a result, having Salesforce skills in our resume would definitely add a certain charm. The community has been created with this vision in mind. Students are provided with thorough guidance of how to learn about Salesforce.

Trail head is a series of online tutorials that coach beginner and intermediate developers who need to learn how to code for the Salesforce platform. Lessons are presented in a specific sequence, so students have a predefined path to follow a guided and curated experience.

It's the fun way to learn the skills students need to transform, earn credentials that grow their career, and connect with a global movement of Trailblazers to continue learning together. Armed with their new knowledge, students can take on careers in marketing, sales, and technology. Each role provides these new professionals a way to put their Salesforce skills to use and develop their careers.



Robotics Club

It all started with designing and planning of the bot. We started by working on the main skeleton structure of the bot. Being light and strong, aluminium was the best choice for the skeleton. An accurate, to scale, sketch of the bot was made for reference.

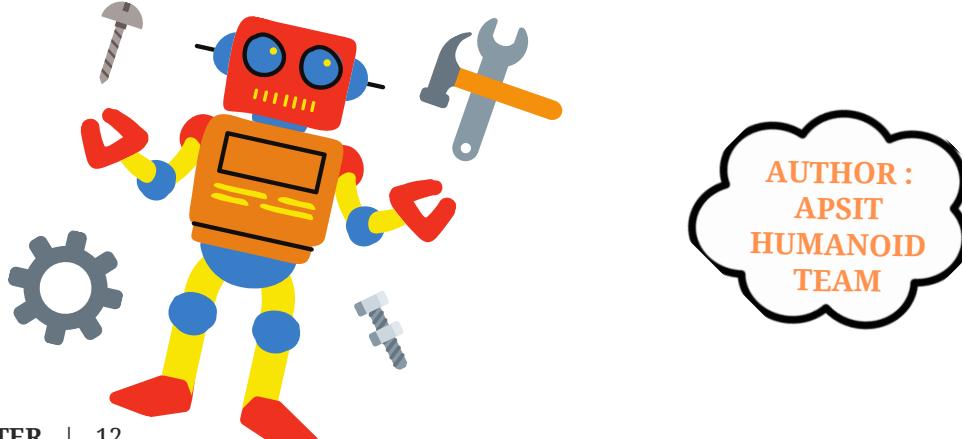
The bot consists of a primary structure and a secondary structure over the skeleton. Primary structure is made of kynar500 (hardened aluminium polymer) and secondary structure of hardened foam. After getting overview of everything, we simultaneously started to work on the hands and legs. The fabrication of thigh and calf was arduous than any other individual structure. To give the bot a human appearance, the legs were to be as accurate as possible.

After the completion of the fabrication, we started with the electronic part. After acquiring the key equipment like servo motors, Microprocessors, wires, DC motor etc we started connecting them and integrating them to the body of the bot. To power the humanoid we were more inclined towards making our own battery management system rather than purchasing the ready made ones available.

Finally the coding of the bot comes into the picture. This coding ensured the movements of servo motors which were attached to shoulders, neck and elbow. Initially while working on the coding, the bot could successfully perform some basic actions like handshake, hello, responding with a yes/no etc.

Now it was time to make the bot mobile. This was achieved by making the rover. This aspect of the bot was achieved by attaching wheels below the foot which were to be run by DC motors. A line follower was also attached to provide the feature of following a predesignated path, if necessary. Movement of the bot can be controlled by a mobile phone via Bluetooth connection with the Bluetooth module attached to the bot.

With all this in place, we put in some additional features to level up the already successful humanoid made with our sweat and blood. Additional features included were- 1. HD camera 2. Night Vision camera. Extra step up and step down module for any further updates. All this would not have been possible without the immense support of our principal Dr. Uttam Kolekar, Dean Dr. Sameer Nanivadekar, external faculty Mr. Santosh Hulawale and the faculty of our college.



APSIT Skills Centre

Setting the new trends in the field of Technical Education

As per the quote by Benjamin Franklin “Tell me and I forget. Teach me and I may remember. Involve me and I learn”. When students pass graduation level they can't cope up with industry requirements. APSIT Skills Centre may be a turning point in the development of Indian higher technical education. It is also useful for students to achieve employ-ability.

APSIT Skills Centre is an innovative model for teaching and learning globally trending technologies to achieve the industrial objective through hands-on training by allowing students to choose an appropriate course/skill set as per their interest, do hands-on training from the industry experts and finally go for the international certification in a specific domain.

In the words of Dr. Sameer Nanivadekar, CEO of APSIT Skills and Dean Administration of A. P. Shah Institute of Technology, "Our idea behind this APSIT Skills initiative is a techno platter which enables students to understand latest technologies in their field and they can choose to do this free of cost, as total investment for APSIT Skills is done by the management. So we will able to develop industry ready engineers."

INDUSTRY COLLABORATIONS WITH APSIT SKILL Centre Following Globally trending technologies and industries are collaborated with APSIT Skill Centre department wise :

A} Computer Engineering / IT / EXTC

- NVIDIA Deep Learning Institute
- Block-Chain Council Membership
- RedHat Linux Academy Centre
- Open Source Experimental Lab
- Oracle Academy
- AWS Academy & AWS Educate
- Dell EMC Academic Alliance
- e-Yantra Robotics Lab
- Texas Instruments Innovation Centre
- CISCO Networking Academy
- Partnership with Leading India
- VMware IT Academy



ARTICLES

B} Mechanical Engineering

- MSC Software Training Centre
- Siemens Centre of Excellence
- 'Dassault Systems' CLIC Program
- ANSYS Authorised Training Centre
- Autodesk Hub
- e-Yantra Robotics Lab
- Texas Instruments Innovation Centre
- BMW Skill Next

C} Civil Engineering

- MSC Software Training Centre
- Siemens Centre of Excellence
- Bentley Institute Academic Program
- Autodesk Academy
- Oracle Academy

Advantages of APSIT SKILL Centre

- Globally trending technologies under one roof
- International certification at absolutely no extra cost (since we are non-profit organisation students outside APSIT wishing to partake have to make a Rs.1000/- donation to Army Relief Fund)
- Learn directly from corporate trainers
- Enhance Employ-ability skills
- To be an industry ready engineer

APSIT Skill Centre is presented as the most adequate educational methodology for the overall/all-round development of students. This skill centre is based on globally trending technologies, international certification, and industrial collaborations.

APSIT Skill Centre requires that both instructors/industry experts and students assume a more active role, greater shared commitment and responsibility for their own learning in which students have to be active recipients of knowledge.

Students will have hands-on experience, potentiating their personality and taking them closer to reality.

As a final conclusion, we can highlight an initiative to prepare industry ready engineers by inculcating practical knowledge and hand-on training.

AUTHOR:
MEET
SHAH





Credits

Aaditya Muley - Editor in Chief & Design

Mukul Aigalikar - Content Collection

Utkarsh Naik - Content Collection

Kaushal Attal - Content Collection & Promotion

Anuj Mishra - Design & Promotion

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