

Existing Zonal Leads



VES INSTITUTE OF TECHNOLOGY, MUMBAI

LEAD PERSON: DR. MRS M.VIJAYALAKSHMI, PROFESSOR, VICE PRINCIPAL

FACULTY SELECTED FOR THE RESEARCH GROUP

DR. MRS. J.M. NAIR, PRINCIPAL

DR. MRS. SHALU CHOPRA, ASSOCIATE PROFESSOR, HOD

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VESIT LeadingIndia.AI Activities for the Academic Year 2020-21

As a new initiative in Academics and Research, VESIT has become one of the Zonal Lead Partners with LeadingIndia.AI, Nationwide Initiative. The mission of this initiative is to promote Deep Learning and AI skills mainstream in India, to fulfill the trilateral needs of entrepreneurship, Industry-academia partnership, and application-inspired Engineering Research. VESIT LeadingIndia AI Team is lead by Dr. (Mrs.) Vijayalakshmi Murli (Vice Principal, VESIT) along with Dr. (Mrs.) J. M Nair (Principal, VESIT), Dr. (Mrs.) Shalu Chopra (Head of IT Department), Mrs. Sangeeta Oswal (Assistant Professor, MCA Department), Mrs. Vidya Pujari (Assistant Professor, IT Department) and Mrs. Lifna C S (Assistant Professor, Computer Engineering Department). Under this association, various activities are being scheduled to Promote AI and Deep Learning Skills among Students and Faculties and to get them ready for the future.

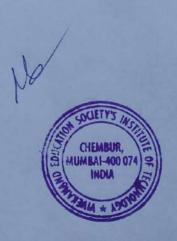
During the Academic Year 2020-21 the following activities were conducted during the COVID'19 Lockdown:

- 1. <u>Virtual Summer Internship Program for Students</u>
- 2. Arranged Tech-Xpert Talks as a part of VESIT Academia Industry Connect Program
- 3. Published 13 Student Blogs on VESIT AI Gyan Website

1. Virtual Summer Internship Program for Students

On behalf of VESIT - LeadingIndia.AI Team, 6 weeks - Virtual Summer Internship Program 2020 was offered by <u>LeadingIndia.AI</u> to students during the Lockdown period in the following topics in two slots (Slot 1: 11th May 2020 - 19th June 2020 & Slot 2: 1st June 2020 - 10th July 2020):

- 1. Object Recognition and Detection
- 2. Natural Language Processing
- 3. Unusual Activity Detection
- 4. Cyber Fraud Detection
- 5. Real-time Video Processing
- 6. Reinforcement Learning
- 7. Drone Surveillance
- 8. Object Detection using Humanoid Robot NAO
- 9. Compression Techniques



VESIT LeadingIndia.AI Activities for the Academic Year 2020-21

Around 33 students from all branches were selected and completed the Internships successfully. The names of some Research Projects executed are as follows:

- 1. Violent Individual Identification using Deep Learning
- 2. Pandemics! A Harsh Reality:(
- 3. Flu Shot Learning: Predict H1N1 And Seasonal Flu Vaccines
- 4. Recognizing Emotion From Speech Using Machine Learning And Deep Learning
- 5. IDTReeS Integrating Data Science With Trees And Remote Sensing
- 6. Parameters Optimization Of A Learning Model For Hyperspectral Image Classification
- 7. Convolution Neural Networks For Urban Sound Classification
- 8. Detection Of Epileptic Seizure Using Deep Learning Techniques.
- 9. Improved KNN Based Music Recommendation Engine
- 10. A Structured Filter Pruning Approach for Efficient Inference of Deep Neural Networks
- 11. Making Deep neural network's ready for Mobile/Edge devices
- 12. Identifying weeds using Image classification
- 13. DengAI: Disease Spread Prediction

2. Arranged Tech-Xpert Talks as a part of VESIT Academia Industry Connect Program

VESIT Renaissance Cell in association with VESIT - IQAC and VESIT - IIC organized "Tech-Xpert Talks: VESIT Academia Industry Connect Program", a National-Level Technical Talk Series in association with Industry partners of VESIT from 22nd July to 31st July 2020 for the Faculties, Industry Professionals, Research Scholars and Students of various Departments and Institutes. Sessions were arranged to provide insights into the Emerging Areas of Technology and their applications in diverse sectors by Industry experts from different VESIT academies. Being one of the Industry Partners, VESIT LeadingIndia.AI Academy Team arranged two Expert Talks. The Expert Talks was a Live event on Cisco Webex with 100+ Participants. The details are as follows:

- 1. "AI in action-The transformative applications of AI in real world" by Devesh Rajadhyax, Founder and CEO, Cerelabs Pvt. Ltd. on 26th July 2020 @ 4pm
- 2. "Let's on-board Data flight towards AI based Decisions" by Jatinder Kautish, Director
 - Data Science & AI, Capgemini India on 27th July 2020 @ 10am.





3. Published 13 Student Blogs in VESIT AI Gyan Website

Based on the Internships attended by students at various Industries and Startups, articles written by students were scrutinized and Top 13 were published in VESIT AI Gyan website - https://vesitaigyan.ves.ac.in/. The details of the Blog are as follows:

| No | Title of Blog with Links to website | Authors |
|----|--|--------------------|
| 1 | Violent Individual Identification using Deep Learning | Advait Naik |
| 2 | Pandemics! A Harsh Reality :(| Jay Jhaveri |
| 3 | Flu Shot Learning: Predict H1N1 And Seasonal Flu Vaccines | Jay Jhaveri |
| 4 | Recognizing emotion from Speech using Machine learning and Deep learning | Abhay Anupam Gupta |

VESIT LeadingIndia.AI Activities for the Academic Year 2020-21

| 5 | Parameters Optimization of a learning model for Hyperspectral Image classification | Srajan Shetty |
|----|--|---------------------|
| 6 | IDTReeS: Integrating Data science with Trees and Remote Sensing | Rahul Koli |
| 7 | Convolution Neural Networks for Urban Sound Classification | Neeraj Ochani |
| 8 | Detection Of Epileptic Seizure Using Deep Learning Techniques. | Richa Bhatia |
| 9 | Improved KNN Based Music Recommendation Engine | Shivani Vijay Patil |
| 10 | A Structured Filter Pruning Approach for Efficient Inference of Deep Neural Networks | Akash Maurya |
| 11 | Making Deep neural network's ready for Mobile/Edge devices | Devdatta Khoche |
| 12 | Identifying weeds using Image classification | Archana Bhatia |
| 13 | DengAI: Disease Spread Prediction | Padmaja Borwankar |

Reports of the Activities Enlisted:

- 1. Virtual Summer Internship Program for Students
- 2. Arranged Tech-Xpert Talks as a part of VESIT Academia Industry Connect Program
 - a. Talk on 26th July 2020
 - b. Talk on 27th July 2020
- 3. Published 13 Student Blogs on VESIT AI Gyan Website