



NEW HORIZON
COLLEGE OF ENGINEERING



Department of Information Science and Engineering
Beyond Expectation



A Half – Yearly Publication

i-News

NEWS LETTER

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JAN-JUL

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Message From Principal



Dr. Manjunatha,
Principal,
New Horizon College of Engineering, Bengaluru.

It gives me great pleasure to give my best wishes to i-News, a newsletter from the Department Of Information Science and Engineering Of New Horizon College Of Engineering, Bengaluru. The students and faculties of the department are always proactive in taking initiative in organizing all kinds of events. I congratulate all achievers, contributors and editorial board for bringing out such an informative newsletter. I hope this newsletter reflects all activities Of the department and inspires Others to do their best.

Message From HOD



Dr. R.J Anandhi,
Professor and HOD,
Department of Information Science and Engineering

'Neither we can make yesterday better nor you can control what will come tomorrow. But today is a gift. you can do your best.'

I am very pleased to present the newsletter i-News Of ISE Department, New Horizon College Of Engineering, Bengaluru. This new endeavour is the result Of the efforts put in by a dedicated team of teachers and students. We provide opportunities for students to organize and participate in various curricular, co-curricular and extra-curricular activities through various club activities . This newsletter offers a platform for showing our activities and sharing our milestones achieved by our department. convey my best wishes to students and congratulate entire teary' of faculties and editors for making this issue exciting and interesting.

In this issue

- About Department
- Achievements
- Department toppers
- Club Activities and events
- Expert talks conducted

About The Department

Information science and Engineering department focuses on current Information Technology trends, and Domain Specific Applications.



The program facilitates the evolution of skills in students to help them attain a higher degree of knowledge, global competency and excellence, for the betterment of the society. Information Science and Engineering course at New Horizon College Of Engineering is designed to meet industry standard and cope up with the emerging technology. There is a great emphasis on holistic learning to help the students to make significant contributions at all levels and to meet the expectations of stakeholders.

• Vision

To emerge as a Department of eminence in Information Science and Engineering in serving the Information Technology industry and the nation by empowering students with a high degree of technical and practical competence.

• Mission

- To strengthen the theoretical, practical and ethical dimensions of the learning process by continuous learning and establishing a culture of research and innovation among faculty members and students.
- To build long-term interaction between the academia and Information Technology industry through the involvement of the Information Technology industry in the design of curriculum and its hands on implementation.
- To strengthen and mould students in professional, ethical, social and environmental dimensions by encouraging participation in co-curricular and extracurricular activities.

• Quality Policy

To provide services of the highest quality both curricular and co-curricular so that our students can integrate their skills and serve the industry and society equally well at a global level.

PROGRAM OUTCOMES (POS)

PO1: Engineering Knowledge

Apply the knowledge of Engineering Mathematics, Basic Sciences, Engineering Fundamentals, and an engineering specialization to the solution of complex Information Science and Engineering Problems.

PO2: Problem analysis

Identify, formulate, review research literature, and analyse complex engineering problems of Information Science and Engineering reaching substantiated conclusions using first principles of Engineering Mathematics and Engineering Sciences.

Achievements

• Lowe's India Campus Challenge 2020 16th May 2020

LOWE's announced its first ever campus hackathon challenge in February 2020. Around 1000 teams from across the country including NIT's and top Engineering institutions participated in the challenge comprising of 3 rounds. 22 teams including 5 teams from NHCE were shortlisted for the final round. 4 teams were finally selected. Proud to share that 2 teams from NHCE are amongst the winners. NHCE bagged the 2nd place (Rs. 1 lakh cash prize) and 3rd prize (Rs. 50,000 cash prize). The students, Nithya, Ashwin and Karthik from ISE Department have won 3rd place. Our students have taken NHCE to the next level in this All-India Lowe's India campus Challenge 2020. Hearty congratulations to the winning teams who have made NHCE proud.



Winners of Lowe's India Campus Challenge 2020

• Lowes India Placement 2nd July 2020

We are elated to inform that 11 students from 2021 batch Of ISE Department, Nithyashree, Karthik, Ashwin, Akhila, Vaishnavi, Varna Murali, Dharani Dhisha and Deepthi have been selected by LOWES INDIA as Software Engineers with a special salary package of Rs. 19.14 LAKH per annum. Hearty Congratulations to our students.

PO3: Design/Development of Solutions

Design solutions for complex Information Science problems and design system components or processes of Information Science and Engineering that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

• Student Project Proposals Approved for Sponsorship by Karnataka State Council for Science and Technology

The following student Projects were approved for sponsorship by Karnataka State Council for Science and technology (KSCST) under 43rd series of student projects programme: 2019 — 2020.

- ಮಾನಸಿಕ ಆರೋಗ್ಯ: - CHAT BOT FOR MONITORING MENTAL HEALTH.
- SMART CLASSES FOR VISUALLY CHALLENGED PEOPLE.
- ಕೃಷಿ ಕ ರೈಗಾರಿಕಾ ಯಂತ್ರ - BLUETOOTH EMBEDDED ROBOTIC WITH AGRICULTURE PLOWING, SEEDING AND CRASS CUTTING POWERED BY SOLAR ENERGY.
- ಪಾರಶ್ವವಾಯುವಿಗೆ ಧ್ವನಿ: - VOICE FOR PARALYTIC VICTIMS.
"ಕೃಷಿ ಕ ರೈಗಾರಿಕಾ ಯಂತ್ರ"

• Faculty Achievements

Mr. Gangadhar Immadi, Sr. Assistant professor, ISE department received "Coursera: Capsone project course completed with Honours" in July 2020. Faculty members attended many Industrial training programs conducted by reputed companies like Hewlett-Packard (HP), ELSEVIER, VMWARE, ANZ.

The Faculty members Of department published 32 papers in various reputed national and international journals like Scopus, springer, ACM and IEEE.

• Student research activities:

Students of the department published 26 papers in various reputed national and international journals.

PO4: Conduct investigations of complex problems

Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions in Information Science Engineering.

Achievements

• Student Achievements

SEM	NAME	TOPIC
7	Nithyashree	Won Third place in the All India Lowe's India Campus Challenge 2020
	Ashwin	
	Karthik	
7	Nithyashree	Placed in LOWES INDIA as Software Engineers with a special salary package of Rs. 19.14 LACS per annum.
	Karthik	
	Ashwin	
	Akhila	
	Vaishnavi	
	Varna Murali	
	Dharani Dhisha	
	Deepthi	
	Shakti	
	Asha	
Manisha	"ಕೃಷಿ ಕ್ಷೇತ್ರದಲ್ಲಿ ಯಂತ್ರ - "BLUETOOTH EMBEDDED ROBOTIC WITH AGRICULTURE PLOWING, SEEDING AND GRASS CUTTING POWERED BY SOLAR ENERGY" is awarded as best project of the year by KSCT.	

• BE Toppers

NO	SEM	USN	NAME	MARKS (% or SGPA)
1	III	1NH18IS002	Abhiram.R	9.62
2		1NH18IS041	Jnana P J	9.62
3		1NH18IS048	Keerthan H	9.62
4		1NH18IS076	Pooja T	9.62
5		1NH18IS109	SonaliPreetha Nandagopalan	9.62
6		1NH18IS106	Silpa S	9.5
7		1NH18IS125	Virochan A C	9.42
1	V	1NH17IS008	Akhila S	9.78
2		1NH17IS134	Nithyashree G S	9.81
3		1NH17IS126	Varna Murali	9.67
1	VII	1NH16IS034	Geetha B C	9.84
2		1NH16IS051	Lakshmi K S	9.84
3		1NH16IS076	Poojana.V	9.84
4		1NH16IS085	Pratyksha sharma	9.84
5		1NH16IS108	Sindhu K S	9.84
6		1NH16IS110	Spandana	9.84

• MTech Toppers

NO	SEM	USN	NAME	MARKS (% or SGPA)
1		1NH19SFC01	Punith M	9.40
2	I	1NH19SFC02	Ganesh K	8.64
3		1NH19SFC04	Akansha	8.56

• Funds & Grants for year 2019-2020:

- Grant of Rs. 6,51,667/- received for conducting GATE/CAT related classes under PRERANA Scheme of AICTE on 31-11-2019.
- Grants of Rs. 10,000/- received from VTU for the National conference on Research Challenges & Opportunities in Digital and Cyber Forensics conducted on 30-09-2020.
- Grants of Rs. 2,50,000/- received for conducting STTP on IoT Applications under AQIS 2018-19 during the financial year 2019-20.

PO5: Modern tool 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 in Information Science and Engineering.

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 in Information Science and Engineering.

Club Activities

(VMware Club and Note Club)

- VMware IT Academy DAY 2020 (VITA DAY 2020)**
 25th January 2020

The VMware Software India Pvt Ltd & VMware IT Academy of the New Horizon College of Engineering organized VITA Day, A Self-Paced online certification on the 25th of January 2020, around 543 students from various departments (AU, CIV, CSE, ECE, EEE, ISE, ME and MCA) took interests to complete the certification programs that were being offered by VMware. Upon completion, every student was then awarded a digital badge as a reward.



Members of the VMware Club



Group picture with the principal of New Horizon College of Engineering

PARTICIPATION AND EVENT EXPERIENCE:

VMware is a leader in cloud infrastructure and business mobility, through modern learning and credentialing programs that foster professional development and accomplishments. VMware's Digital Badging is an initiative for recognizing talent through secure, verifiable digital credentials that represent knowledge, skill, achievement, and contribution. Witnessing a strong footfall of over 543 students, VITA Day turned out to be a huge success in terms of value being delivered and the grand scale of it as an event. Here are some glimpses into the students with the help of our student volunteers, this event was able to run without hassle, their preparedness and planning helped us be able to address all the needs, The event was a grand success leaving a

remarkable opinion students and VMware faculty coordinators.

- Workshop on Artificial Intelligence**
 28th January 2020

NOTE club of Information Science and Engineering department has conducted a One Day Workshop on Artificial Intelligence (Creating your own A.I. based application using NLP) on 28th January, 2020 for 6th semester students of ISE Dept. The Resource persons, Mr. Vishnuvardhan Y, the founder of Exposys Data Labs and Mr. Jagannath H G, Exposys Data Labs shared their knowledge and experience.

In the Morning Session the Resource person started his lecture by interacting with students about machine learning and artificial intelligence applications. Further the students were exposed to the stages of AI workflow, Industry Trends and some of the real-world applications. Later in the Afternoon Session the students were offered hands-on session on AI projects such as: Facial Recognition, Voice Assistant, Flappy bird and many more using Python programming.



Mr. Vishnuvardhan Y and Mr. Jagannath H G sharing their knowledge.

PO7: Environment and sustainability

Understand the impact of the professional engineering solutions in Information Science and Engineering in Society 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 the Information Science and Engineering practice.

Club Activities

(i-CSEH Club and iSWET(G) Club)

- SecureLinks – Workshop on Cryptocurrencies and Smart Contracts**
 8th February 2020

"SecureLinks Workshop Cryptocurrencies and Smart Contracts" was organized on the 8th of February 2020 by CSEH (Cyber Security and Ethical Hacking Club) Of the Information Science and Engineering Department in collaboration with Nvest Labs, Nvest Group of Companies.

The speakers for the day were Mr. Shorupan Pirkaspathy, CEO Nvest Group of Companies, Mr. Sharath Krishna, CEO of Nvest Labs and Ramesh Copal blockchain instructor at Nvest Labs. The session was interesting and insightful to the students. It gave the students a glimpse of the trending technologies. The session exhibited live demonstration on Ethereum blockchain by Mr. Ramesh Copal. Resource person explained the application of javascript in Blockchain framework of Ethererum and students created smart contracts as projects. With the hands-on workshop, students reaped the full benefits and understood the blockchain concept.



Mr. shorupan Pirkaspathy, Mr. Sharath Krishna and Ramesh Gopal sharing their knowledge.

- Workshop on Blockchain & Cryptocurrencies**
 8th February 2020

The department of Information Science and Engineering has conducted Expert talk on the topic "Blockchain & Cryptocurrency" for the 4th and 6th semester students on 8th FEBRUARY 2020 under the supervision of ISE Head of the department, Dr. Anandhi R J at Chanakya Hall. The expert speaker, Mr. Shorupan Pirkaspathy, was invited to conduct the same.



Mr. shorupan Pirkaspathy sharing his knowledge on Blockchain and Cryptocurrency.

Mr. Pirkaspathy is the CEO of Nvest Group of Companies, oronto (Canada) and CEO of Global Exchange Company. The need for blockchain and cryptocurrency with the real time applications was considered as the key area. he outcome of this program to the students provided good knowledge about Blockchain & Cryptocurrency.

PO9: Individual and team work

Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.

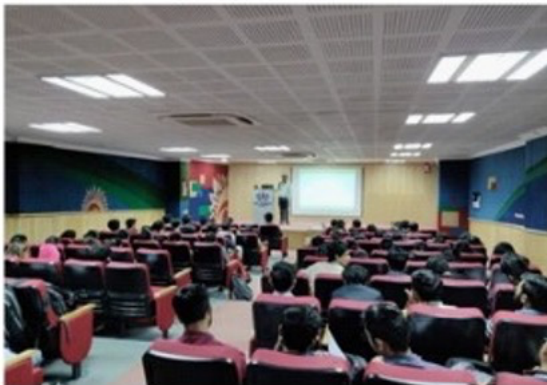
PO10: Communication

Communicate effectively on complex Information Science and 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.

Club Activities (i-SCRUM Club)

- VEDIC MATHEMATICS PROGRAM AND WORKSHOP**
 12th February 2020

i-SCRUM Club, Department of Information Science and Engineering organized a "WORKSHOP ON VEDIC MATHEMATICS" on 12th February 2020 from 1:30 to 4:30 pm, at "CHANAKYA SEMINAR HALL", New Horizon College of Engineering for the fourth semester students of Department of ISE. Resource person for the session was, Mr. Tarique Hasan, Academic Head Competition Forum. He is a leading trainer for competitive examinations like CAT, CAE, TOEFL, GATE, MAT, CMAT and many more.



Mr. Tarique Hasan sharing his knowledge.

Vedic Mathematics is a system of mathematics that helps to solve complicated and time-consuming numerical calculations faster. The speaker grabbed the attention of the audience by introducing different techniques in Vedic Mathematics to solve square root of very large numbers, easy multiplication of large numbers, finding cubes and cube roots and many other techniques without the help of calculators. He also introduced the problems for logic building and each student was made to solve them individually and in groups.



Students actively listening and taking part.

PO11: Project management and 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 broadcast context of technological change.

Department Activities/ Events

- **Visit to Indian Institute of Science IISc Open Day 2020**
29th February 2020

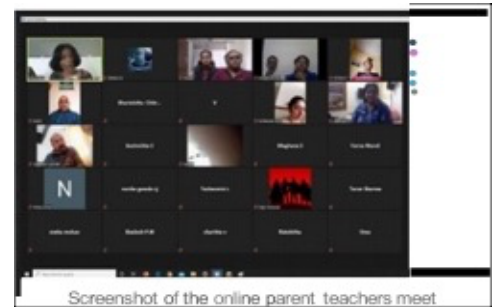
The Department of Information Science and Engineering organized an educational visit to Indian Institute of Science IISc, Bangalore on the 29th of Feb, 2020 to be part of Open Day 2020. A total of 50 students from the 6th semester along with the faculty coordinator Prof Vandana C.P and Prof. Mounica had been a part of this visit. Students visited the inter-disciplinary labs, Pure Mathematics and Physics Labs. Also, organic and Inorganic chemistry departments exhibited their projects which were very inspiring and motivated the students towards Green Earth and environmental conservation. Students learned the importance of automation in inter-disciplinary fields. This Visit was quite a remarkable one that allowed the aspiring engineers to have an experience of Technology revolution. The budding engineers understood the automation and digitalization and its impact on mankind and society. They were highly motivated to take up research activities and give their contribution to the development of Indian economy.



Collage of the visit and the experience

- **Parent Teacher Meeting**
19th May 2020 and 20th May 2020

The Department of Information Science & Engineering, New Horizon College of Engineering has organized an online parent-Teacher meeting on Friday 19th May 2020 for 6th semester and Saturday 20th May 2020 for 4th semester using ZOOM platform at 10:00 am. The main purpose of the meet was to create a common platform, where teachers and parents come together to enrich the student's educational experiences and discuss variety of issues, regarding all round development of students.



The meeting was organized under guidance Of Dr. R Anandhi, HOD, Department of Information Science & Engineering. Teachers and parents of 4th and 6th Semester students attended the meet. Introductory speech was delivered by Dr. R J Anandhi, HOD, Department of Information Science & Engineering and presented the Glimpses Of the department. The program followed with the Q&A session by the parents and perfectly addressed by HOD-ISE. Parents were excited to know about the department and cherished with the Teaching Learning Process and Placements.

PROGRAM EDUCATION OBJECTIVES (PEOS)

PEO 1:

Excel as Information Science Engineers with ability to solve wide range of computational problems in IT industry, Government or other work environments.

PEO 2:

Pursue higher studies with profound knowledge enriched with academia and industrial skill sets.

Department Activities/ Events

- Five Day Virtual FDP on VMware vSphere**
 22nd June 2020 to 26th June 2020

Department Of Information Science and Engineering in collaboration with Industry Institute Interaction Cell, Dept. of HAD organized a "Five Day Virtual EDP on VM ware vSphere". Faculty Members, Research Scholars and students from various colleges and industry participated in the event. participants gained knowledge on VMware vSphere, VMware vCenter and its cloud concepts with hands on session in VMware HOL. Also, at the end of the session participants acquired digital badges from VMware.



Poster of the five days virtual FDP

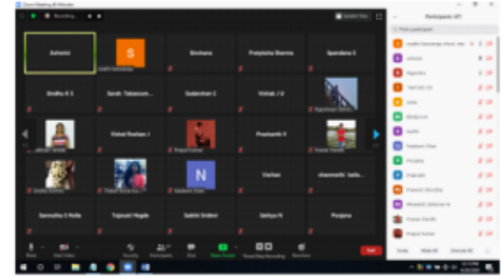
- TECHORIZON – 2020**
 26th June 2020

TECHORIZON-2020- project exhibition of eighth semester students is conducted online on 26.6.2020 in two sessions. The event was sponsored by UNIABROAD, a one Stop solution for overseas education. The event started with a session from the speakers Ms. Ashwini and Mr. Tharun from UNIABROAD. It was an interactive session and students were enlightened with an insight to higher studies. Alumni Judge Sannutha S. Holla, Business Analyst, INTEL PVT LTD scrutinized all the projects and continued with an interaction session with the students. Various queries were posed to the students with respect to projects and the importance of project work was discussed. The best project selected was FOR

PEO 3:

Exhibit adaptive skills to develop computing systems using modern tools and technologies in multidisciplinary areas to meet technical and managerial challenges, which meet societal requirements.

"VISUALLY IMPAIRED" by students, Sunil KA, Pramod Sencha N, MD Shahbaz Khan under the guidance of Dr. P Mangayarkarasi.



Screenshot of the TECHORIZON event

- Online Alumni Meet — Employment Trends Post COVID 19**
 4th July 2020

Alumni expert talk series is an initiative where our successful alumni exhibit their technical expertise, confidence and get connected to their juniors. Department of Information Science & Engineering organized an online alumni expert talk series on the topic "Employment Trends Post Covid-19". Various invited alumni members addressed students with Employment opportunities abroad and provided an insight into Higher studies highlighting the COVID and the sudden change the industries are undergoing. They motivated the students about the need to develop coding skills as Information science Engineer to build confidence and survive in extreme conditions.



Poster of the online Alumni meet.

PEO 4:

Possess the ability to collaborate as a team member and leader with professional ethics to make a positive impact on society.

Expert Talks

By alumnus Sannutha S. Holla and Naveen TK

- ## Alumni Expert Talks

8th February 2020

Alumni expert talk series is an initiative where our successful alumni exhibit their technical expertise, confidence and get connected to their juniors. Department of Information Science & Engineering Department organised Alumni expert talk series on 8th February 2020. The first speaker of the event was Sannutha. S. Holla 2012 batch.

Sannutha S. Holla is currently working as Business Intelligence Solution Analyst in Intel India Pvt. Ltd. She started the session with the various job opportunities available in Intel. Her topic was "Introduction to Supply chain management and Data Analytics". Her session focused mainly on the fundamentals Of Data Analytics and how Supply chain Management is playing a major role in all the domains in current world. Students were provided with good knowledge in the Supply chain Management and data science and were keen to learn the concepts.



Sannutha. S. Holla an alumni sharing her knowledge



The second speaker was by Naveen TK is currently working as an Sr. Data Engineer in Quantella Inc, India. He started the talk addressing his experience in NHCE and the way college helped in achieving his goals. The session continued with introduction Of Version control mechanism. The importance and the need for version control mechanism in development phase in industry was focused. He illustrated the mechanism with real world scenarios and the real challenges faced in the absence of version control. The basic example of restoring a word file was presented to the audience. He also demonstrated the mechanism with GitHub account.

Students found this as an interesting, useful topic and were interested to apply and learn in detail about the mechanism. Alumni were happy to be the part Of the Expert talk and were willing to give back to their alma mater.



Naveen TK an alumni receiving a sapling from Dr. R J Anandhi
HOD of Information Science and Engineering



Naveen TK an alumni sharing his knowledge.

PROGRAM SPECIFIC OUTCOMES (PSOS)

PSO 1:

The ability to understand, analyse and develop computer programs in the areas related to Algorithms, System Software, Web Design, Big Data Analytics, Machine Learning, Internet of Things, Data Science and Networking for efficient design of computer-based systems of varying complexity.

Expert Talks

By Mr. Rajkumar R and Dr. Varuna De Silva

- Mr. Rajkumar R, Wells Fargo, Bangalore on Cloud Computing Distributed Storage**
 14th February 2020

The department of Information Science and Engineering has conducted Expert talk on the topic "Cloud Computing Distributed Storage" for the 4th semester students on 14th February, 2020.

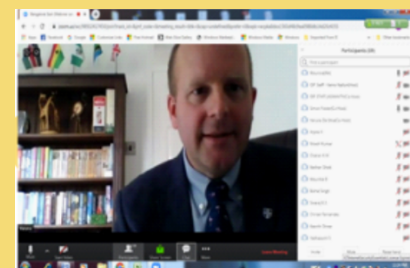
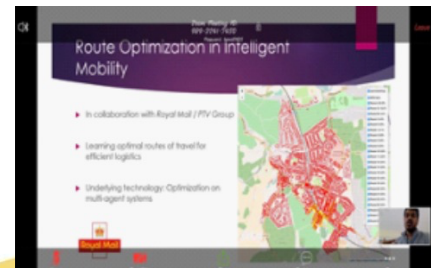
The expert speaker, Mr. Rajkumar R, Wells Fargo, Bangalore was invited to conduct the same. Speaker is multi skilled professional with 11 years of experience in the IT industry specialized with Infrastructure, Health Care, Network and eCommerce domains. The topics covered was Introduction of Cloud computing, Types of cloud computing and Types of cloud services. The outcome of this program to the students provided good knowledge about Cloud Computing and Distributed Storage.



Mr. Rajkumar R in his expert talk on cloud computing and distributed storage.

- Dr. Varuna De Silva Professor at Loughborough University, London on Latest Trends in Machine Learning**
 4th May 2020

The department of Information Science and Engineering has conducted Webinar session on the topic "Latest trends in machine learning" for the 4th and 6th semester students on 4th May 2020 under the supervision Of ISE Head Of the department, Dr. Anandhi R J at ISE Department. The expert speaker Dr. Varuna De Silva Professor at Loughborough university, London was invited to conduct the same. The speaker is multi skilled professional with experience in the IT industry specialized with Machine learning, Database, Coding languages and Agile Techniques. Topics covered were Machine learning, Neural networks and Real time applications. The Of this program IS that the students were provided good knowledge about the machine learning algorithms.

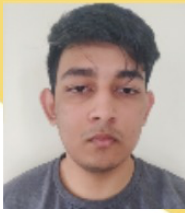


Dr. Varuna De Silva in his expert talk on Latest Trends in Machine Learning

PSO 2:

The ability to apply standard practices and strategies in software project development using innovative ideas and open-ended programming environment with skills in teams and professional ethics to deliver a quality product for business success.

Student Editorial Committee



K Krtin



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