

VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous)

Thindal, Erode -638012

DEPARTMENT OF INFORMATION TECHNOLOGY

(Accredited by NBA & NAAC with 'A' Grade)

DEPARTMENT NEWSLETTER- "VIRTUE"

Academic Year-2020 - 2021

Vision of the Institute

To provide a wide range of Academic and Research Programmes and strive to develop a Centre of Excellence for Learning

Mission of the Institute

M1: To impart essential knowledge to the students through quality education, training and research activities.

M2: To inculcate the students with Societal Awareness, Professional Ethics and Leadership Qualities.

M3: To mould the students as high quality Engineers, Technocrats, Scientists, Administrators and Entrepreneurs.

Vision of the Department

To provide technological excellence in learning in the field of Information Technology and promote academic and research activities.

Mission of the Department

M1: Attain technological excellence through quality education and well-designed curriculum adaptable to technological needs.

M2: Facilitate value added courses and interdisciplinary training to provide highly competent IT professionals and entrepreneurs.

M3: Produce socially aware and ethically responsible engineers through human value education.

M4: Impart collaborative research through academic projects and industry institute interactions.

MESSAGE FROM HOD

‘In the long run, we only hit what we aim at’

- Henry David Thoreau

I am elated to present the 12th issue of the newsletter ‘virtue’. It is important to keep our alumni, students and colleagues at other institutions to aware of various activities and achievements of the departments in the last 6 months. I am very happy with the progress of the



department has been made by imbibing value based education synergises with modern teaching learning methods to produce a generation of well knowledgable and passionately sound. I am positive, that we will continue this journey with elevated enthusiasm and persistently provide a platform of holistic learning to the young generation of learners. I expect all my young technocrats to focus on their cherished goals and strive hard to accomplish them. As you read through the pages you will realize that the department had a very busy and fruitful semester which was full of various events and activities by the students and faculty members in the fields of academic, extra-curricular as well as research. I congratulate all faculty members, students and alumni for the achievements and contributions they have made towards the department and the institute and I look forward to your support in future also. Wish you a great semester ahead.

- Dr. V. K. Manavalasundaram

PEO's of the Department:

The Program Educational Objectives of the Information Technology Program is listed below:

PEO 1 – **Preparation:** Excel in post graduate studies and career.

PEO 2 - **Core Competence:** Solve problems using the engineering fundamentals.

PEO 3 - **Professional Environment :** Have engineering breadth to achieve solutions for the needs of society.

PEO 4 – **Multidisciplinary:** Develop professional and ethical values, effective communication, team work and managerial skills for societal and environmental contexts.

PEO 5 - **Learning Environment:** Attain professional competence through lifelong learning.

PROGRAMME OUTCOMES:

Engineering Graduates will be able to:

- PO 1 - **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO 2 - **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO 3 - **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.
- PO 4 - **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.
- PO 5 - **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- PO 6 - **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.
- PO 7 - **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO 8 - **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO 9 - **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO 10 - **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.
- PO 11 - **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.
- PO 12 - **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.

PROGRAMME SPECIFIC OUTCOME:

- PSO 1 - Apply technical concepts and practices in information technology and effectively integrate IT-based solutions into the user environment.
- PSO 2 - Practice as an ethical software engineer in the evolving discipline of Information Technology by employing management skills learnt through internships and multidisciplinary projects.

PROGRAMS ORGANISED BY THE DEPARTMENT

FACULTY DEVELOPMENT PROGRAM

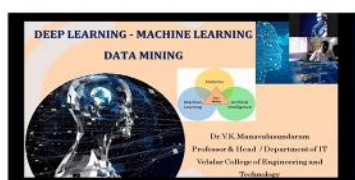
- Seven days online Faculty Development Program on 'Scope of Artificial Intelligence and Machine Learning in Automation' was conducted from 11.05.2020 to 17.05.2020.
- Five days online Faculty Development Program on 'Importance of IT in the Evolution of IoT and Data Analytics World' was conducted from 25.05.2020 to 29.05.2020.

- Six days Short Term Training Program Series-1 on 'Deep Learning Applications and Challenges in Bigdata Analytics' were conducted from 17.08.2020 to 22.08.2020.



- Six days Short Term Training Program Series-2 on 'Deep Learning Applications and Challenges in Bigdata Analytics' was conducted from 07.09.2020 to 12.09.2020.

- An AICTE Training And Learning sponsored five days Faculty Development Program on 'Artificial Intelligence' was conducted from 24.08.2020 to 28.08.2020.



- Six days Short Term Training Program Series-3 on 'Deep Learning Applications and Challenges in Bigdata Analytics' was conducted from 05.10.2020 to 10.10.2020.

- A Hands-on Training on 'Lambda Expression - An Industry Perspective' was conducted on 23.10.2020 for the benefit of Third year students.



- Quiz competition for students on 'Tech whiz- A Coding Quiz' was conducted on 29.10.2020 for the benefit of Third and Final year students.

ASSOCIATION ACTIVITIES- INFOAUXANO

- A webinar on 'Friendly introduction to Machine learning & Deep learning' was conducted on 11.04.2020 for the benefit of Second year students.
- A webinar on 'Netflix matrix factorization & Devops tools' was conducted on 11.04.2020 for the benefit of Third year students.
- A webinar on 'Building a Website and make it live' was conducted on 18.04.2020 and the session was handled by R.Manoj Aiyer, Microsoft Student Partner, UI/UX Designer, Coimbatore.
- Alumni webinar series on 'Opportunities & Interview Tips for budding Engineers' was conducted on 02.05.2020 for the benefits of second year students. The session was handled by Mr. Mohan Thangarasu (Alumni of IT department) Senior Application Developer, IBM India Pvt., Ltd., Bangalore.
- A five days fresher's webinar series on 'Discover a path to our vision' was conducted from 01.06.2020 to 05.06.2020 for the benefit of first year students.

- An Online Students Orientation Programme was conducted on 10.07.2020 for the benefit of the Firstyear students. The session was handled by Dr. V. K. Manavalasundaram, Professor & HOD/IT.



- A webinar on 'Explore Machine Learning' was conducted on 08.08.2020 for the benefit of Second and Thirdyear students

- A webinar on 'Opportunities for Freshers in Data Science Industry' was conducted on 12.08.2020 for the benefit of Second and Thirdyear students.



- Association Inaugural Function on 'Introduction to Latest Technologies' was conducted on 22.09.2020 and the guest speech was given by Mr. M. Deepan Raj, Embedded Software Engineer, Visteon Technical Services Centre, Chennai.

- A Hands-on Training on 'Java Collection Framework' was conducted on 28.09.202 for the benefits of Third year students. The session was handled by Mr. C. Rukmani Khandhan, Associate Professor, Department of CSE, K.S.Rangasamy College of Technology.



- A webinar on 'Innovative Entrepreneurs' was conducted on 21.10.2020 for the benefit of Second, Third and Final year students.

STUDENT DEVELOPMENT PROGRAM

- Five days online Student Development Program on 'Emerging Technologies for Career Excellence' was conducted from 15.05.2020 to 20.05.2020.
- Seven days online Student Development Program on 'Essential Technologies for Technocrats' was conducted from 22.05.2020 to 28.05.2020.

PLACEMENT ACTIVITIES

- Harini M, Kaviya K, Khavya S, Malarvizhi M and Sudha G P of Final year has got placed in DXC.technology,
- Khavya S and Tharachandar B of Final year have got placed in Kaar Technologies.
- Harini M, Khavya S, Sanjana R, Thiriveni V of Final year has got placed in Cognizant Technology Solutions.

Placement-Training:

- TCS Code Vita training was conducted from 24.05.2020 to 01.06.2020 and 59 students got benefitted.
- Wipro PRP training was conducted from 22.06.2020 to till date and 44 students got benefitted.
- DXC training was conducted from 27.08.2020 to 04.09.2020 and 55 students got benefitted.

Placement-Campus Drive:

- Acies Campus Drive was conducted on 28.08.2020 and 54 students attended.
- DXC Campus Drive was conducted on 15.09.2020 and 55 students attended.
- Kaar Technology Campus Drive was conducted on 27.09.2020 and 55 students attended.

STUDENT ACTIVITIES

- 7 students attended a Soft Skills Development Program on 'Career Edge Knockdown the Lockdown' conducted by TCSiON from 05.05.2020 to 17.05.2020.
- 6 students attended Online Hi-Tech Test on the topics C++, DBMS, Computer Networks and Data structures & Algorithms during May – 2020.
- 139 students attended online quiz on various topics conducted by other colleges during May to June – 2020.
- 34 students attended a Student Development Program on 'Emerging Technologies for Career Excellence' conducted by Velalar College of Engineering and Technology, Erode from 15.05.2020 to 20.05.2020.
- 45 students attended a Student Development Program on 'Essential Technologies for Technocrats' conducted by Velalar College of Engineering and Technology, Erode from 22.05.2020 to 28.05.2020.
- 196 students attended seminar, workshops and webinar on various topics conducted by various Academies, host and other institutions during April to June 2020.
- 30 students attended an Industrial Training Program on 'Future Scope of Engineering in Global Development' conducted by Velalar College of Engineering and Technology, Erode from 27.07.2020 to 31.07.2020.
- 4 students attended an online workshop on 'Algorithm and Backtracking' conducted by Velalar College of Engineering and Technology, Erode on 09.08.2020

- 78 students attended a webinar on 'Opportunities for Freshers in the Data Science Industry' conducted by Velalar College of Engineering and Technology, Erode on 12.08.2020
- 6 students attended an online workshop on 'Data Science and Face Detection' conducted by Velalar College of Engineering and Technology, Erode on 19.08.2020
- 32 students attended online workshops, webinar and hands-on training on various topics conducted by various Academies, host and other institutions during July to September 2020.
- Dharshini M (III-IT) participated the Online Aryabhata National Maths Competition conducted by All India Council for Technical Skill Development (AICTSD)

INTERNSHIP

- Haripriya M (II-IT) completed online internship training on 'Web Development' conducted by Echo Corporation, Chennai during June 2020.
- Dheekthana S (III-IT) completed the Internship program conducted by My Captain from 29.09.2020 to 30.09.2020

FACULTY ACTIVITIES

Key note Address Delivered by Faculty members

- Dr. R. Mynavathi acted as a resource person for the AICTE sponsored STTP series-1 'Deep Learning Applications and challenges in Bigdata Analytics', conducted by Velalar College of Engineering and Technology, Erode from 11.08.2020 to 16.08.2020 and handled a topic 'Introduction to Bigdata'.
- Dr. R. Mynavathi acted as a resource person for the AICTE sponsored STTP series-2 'Deep Learning Applications and challenges in Bigdata Analytics' conducted by Velalar College of Engineering and Technology, Erode from 07.09.2020 to 11.09.2020 and handled a topic 'Data management towards Bigdata Analytics-MongoDB'.
- Dr. V. Srinivasan acted as a resource person for the AICTE sponsored STTP series-2 'Deep Learning Applications and challenges in Bigdata Analytics' conducted by Velalar College of Engineering and Technology, Erode from 07.09.2020 to 11.09.2020 and handled a topic 'Bigdata Tools'.

Online Course Completed:

- Ms. T. Nithya, Mr. A. Logeswaran completed an online course on 'Python 101 for Data Science' on 03.07.2020 conducted by Cognitive class.

Journal Publication by the faculty members

- Dr. V. K. Manavalasundaram, 'QR Based Automatic Penalty Charging for Violation of Traffic Rules', International Journal of Innovative Research in Science, Engineering and Technology, ISSN:2319-8753, Vol. 9, Issue 08, pp.7212-7215, August 2020
- Dr. M. Kavitha, Ms. R. Menaka 'Geo Tracking System Using Xamarin Approach', International Journal of Scientific and Technology Research, e- ISSN: 2277-8616, Vol. 9, Issue 09, pp.3095-3100, September 2020.

Workshop:

- Ms. T. Nithya, Ms. V.Leela, Ms. R. Maheshwari, Ms. D.Suganya, Ms. R.Supriya, Ms. N.V. Keerthana, Ms. T Kokilavani attended an online workshop on 'R-Programming' conducted by Malla Reddy Institute of Technology and Science, Hyderabad from 28.07.2020 to 30.07.2020.
- Mr. C. Saravanan, Ms. S.Suganya, Ms. R.Maheshwari, Ms. S.Kiruba, Ms. T. Kokilavani attended an online workshop on 'Cyber Attacks and Attack Handling Methods' conducted by Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore on 30.09.2020.
- Ms. S. Viveka, Ms. V.Leela, Ms. S.Suganya, Ms. R.Maheshwari, Ms. S.Kiruba, Mr. A.Logeswaran, Ms. P.Prema, Ms. D.Suganya, Ms. R.Supriya, Ms. N.V. Keerthana attended an online workshop on 'Cloud Hadoop and Bigdata Analytics' conducted by Malla Reddy Institute of Technology and Science, Hyderabad from 24.07.2020 to 25.07.2020.
- Ms. T. Kokilavani attended an online workshop on 'Data Science Face Detection' conducted by Coding Blocks, on 19.08.2020
- Mr. A. Logeswaran attended an online workshop on 'Analytics and Data Management-Insights on Data Science' conducted by SRM Institute of Science and Technology, Vadapalani on 20.10.2020 and 21.10.2020.

Webinar:

- Mr. A. Logeswaran, attended a webinar on 'Practical Approach towards Designing a Cloud Architecture', conducted by Paavai Engineering College, Namakkal from 29.06.2020 to 01.07.2020.
- Mr. A. Logeswaran, attended a webinar on 'Self-Assessment & Self-Awareness, A hands-on Approach', conducted by J.B. Institute of Engineering & Technology, Hyderabad on 01.07.2020.
- Ms. P. Prema, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Where Will You Fit into a Real Time Project?', conducted by Sri Eshwar College of Engineering, Coimbatore from 01.07.2020 to 02.07.2020.
- Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Machine Learning for AI', conducted by Muthurangam Govt. Arts college, Vellore on 01.07.2020.
- Mr. A. Logeswaran, attended a webinar on 'Recent Trends in Cloud Computing', conducted by Mohamed Sathak A J College of Engineering, Chennai on 04.07.2020.
- Ms. R. Maheshwari, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Security Issues in Internet of Things' conducted by St. Mother Theresa Engineering College, Tuticorin on 06.07.2020.
- Ms. T. Nithya, Mr. C. Saravanan, Ms. V. Leela, Ms. R. Maheshwari, Mr. A. Logeswaran, Ms. P. Prema, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Python Numpy with Jupyter Notebook' conducted by Malla Reddy Institute of Technology and Science, Hyderabad, on 06.07.2020.
- Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Quit your Comfort zone and Hit your Target', conducted by Sri Eshwar College of Engineering, Coimbatore on 08.07.2020.
- Ms. V. Gomathi, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Engineer Your Thoughts for IT Industry', conducted by Sri Eshwar College of Engineering, Coimbatore on 09.07.2020.
- Ms. N. V. Keerthana attended a webinar on 'Product lifecycle management', conducted by Sri Eshwar College of Engineering, Coimbatore on 10.07.2020
- Ms. T. Nithya, Mr. C. Saravanan, Ms. R. Maheshwari, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana, Ms. T. Kokilavani attended a webinar on 'Effective communication' conducted by Sree Narayana Guru College of Engineering and Technology, Kerala on 11.07.2020.
- Ms. D. Suganya, attended a webinar on 'E-Mobility: Electrification of Vehicle Powertrains', conducted by Sri Eshwar College of Engineering, Coimbatore on 11.07.2020
- Ms. D. Suganya, Ms. R. Supriya attended a webinar on 'Linear Regression model in Machine Learning', conducted by Sri Eshwar College of Engineering, Coimbatore on 14.07.2020
- Ms. P. Prema, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'An Insight into Mobility', conducted by Sri Eshwar College of Engineering, Coimbatore on 17.07.2020.

- Dr. R. Mynavathi, Mr. A. Logeswaran, Ms. P. Prema, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended an International webinar on 'Introduction to Artificial Intelligence and its Applications' conducted by Kanpur Institute of Technology, Uttarpradesh on 21.07.2020.
- Mr. A. Logeswaran, attended a webinar on 'Power of Digital Education During COVID 19', conducted by Shree Venkateshwara Hi-Tech Engineering College, Gobichettipalayam on 24.07.2020.
- Ms. V. Leela, Mr. A. Logeswaran, Ms. D. Suganya, Ms. R. Supriya, Ms. T. Kokilavani attended a webinar on 'Automotive Embedded Systems' conducted by Malla Reddy Institute of Technology and Science, Hyderabad, on 25.07.2020.
- Ms. S. Viveka, Mr. C. Saravanan, Ms. V. Leela, Ms. S. Suganya, Ms. R. Maheshwari, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. R. Supriya, Ms. N. V. Keerthana, Ms. T. Kokilavani attended a webinar on 'BlockChain Technology' conducted by Princeton Institute of Engineering and Technology for Women, Hyderabad on 30.07.2020.
- Ms. V. Leela, Mr. A. Logeswaran attended a webinar on 'Big Data Processing using Apache Spark' conducted by JNN College of Engineering, Shivamogga, Karnataka, on 08.08.2020
- Ms. V. Leela, Ms. S. Suganya, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Verilog HDL in Chip Design Cycle and Importance of Hardware Emulation' conducted by Malla Reddy Institute of Technology and Science, Hyderabad, on 08.08.2020.
- Ms. T. Nithya, Mr. C. Saravanan, Ms. V. Leela, Ms. S. Suganya, Mr. A. Logeswaran, Ms. P. Prema, Ms. D. Suganya, Ms. T. Kokilavani attended a webinar on 'Opportunities for freshers in the Data Science Industries', conducted by Imarticus Learning at Velalar College of Engineering and Technology, Erode on 12.08.2020.
- Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Enhancing Customer Experience using AI and Study Engineering with Learn by Doing Practices', conducted by Sri Eshwar College of Engineering, Coimbatore from 13.08.2020 to 14.08.2020
- Ms. N. V. Keerthana attended a webinar on 'Study Engineering with Learn by doing practices', conducted by Sri Eshwar College of Engineering, Coimbatore on 14.08.2020
- Mr. A. Logeswaran, attended a webinar on 'Entrepreneurship and Funding Opportunities', conducted by AISSMS Institute of Information Technology, Pune on 19.08.2020.
- Ms. P. Prema, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Smart Manufacturing and its Insights', conducted by Sri Eshwar College of Engineering, Coimbatore on 24.08.2020.
- Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'Rural development with people's participation', conducted by Sri Eshwar College of Engineering, Coimbatore on 25.08.2020.
- Mr. V. Srinivasan attended a webinar on 'Bharathiyin Parvaiyil Bharatham', conducted by Velalar College of Engineering and Technology, Erode on 18.09.2020
- Mr. V. Srinivasan attended a webinar on 'Innovation and Entrepreneurial Education', conducted by Sounarya Institute of Management and Science, Bengaluru on 16.09.2020
- Mr. A. Logeswaran, attended a webinar on 'Cyber Attacks and Attack Handling Methods', conducted by Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore on 30.09.2020.
- Ms. R. Maheshwari, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. T. Kokilavani attended a webinar on 'Teach with Cheers', conducted by Muthayammal Engineering College, Rasipuram on 14.10.2020.
- Mr. A. Logeswaran, attended a webinar on 'Recent Advances In AI For Data Science, Computer Vision and NLP', conducted by PSG Institute Of Technology And Applied Research on 29.10.2020
- Ms. T. Nithya, Mr. C. Saravanan, Ms. R. Maheshwari, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana, Ms. T. Kokilavani attended a webinar on 'Effective communication' conducted by Sree Narayana Guru College of Engineering and Technology, Kerala on 11.07.2020.
- Ms. D. Suganya, attended a webinar on 'E-Mobility: Electrification of Vehicle Powertrains', conducted by Sri Eshwar College of Engineering, Coimbatore on 11.07.2020
- Ms. D. Suganya, Ms. R. Supriya attended a webinar on 'Linear Regression model in Machine Learning', conducted by Sri Eshwar College of Engineering, Coimbatore on 14.07.2020
- Ms. P. Prema, Ms. R. Supriya, Ms. N. V. Keerthana attended a webinar on 'An Insight into Mobility', conducted by Sri Eshwar College of Engineering, Coimbatore on 17.07.2020.

Faculty Development Program

- Mr. A. Logeswaran attended an online Faculty Development Programme on 'IoT and Cloud Applications' conducted by Dayananda Sagar Academy of Technology and Management, Bangalore from 06.07.2020 to 10.07.2020
- Mr. A. Logeswaran attended an online Faculty Development Programme on 'Machine Learning Essential for Every Researcher' conducted by Kongu Engineering College, Perundurai from 06.07.2020 to 10.07.2020
- Ms. R. Supriya, Ms. N. V. Keerthana, attended a Faculty Development Programme on 'Leveraging Data Science to unleash Economic growth- a Conservative and Aspirational Forecast', conducted by New Horizon College, Marathalli on 08.07.2020.
- Ms. N. V. Keerthana attended an online Faculty Development Programme on 'World of Cyber Physical Systems and Future Robotics of Industry: cobotics' conducted by R.C.Patel Institute of Technology, Shripur from 11.07.2020 to 12.07.2020
- Dr. S. Viveka, Mr. C. Saravanan, Ms. V. Leela, Ms. R. Maheswari, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. P. Prema, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana, Ms. T. Kokilavani attended an online Faculty Development Programme on 'Evolution of IoT and It's Real Time Applications' conducted by Malla Reddy Institute of Technology and Science, Hyderabad from 13.07.2020 to 17.07.2020.
- Mr. C. Saravanan, Ms. S. Suganya, Ms. R. Supriya, Ms. T. Kokilavani attended an online Faculty Development Programme on 'Research paper Writing using LATEX' conducted by Green ThinkerZ in Association with Spoken Tutorial Project, IIT Bombay from 20.07.2020 to 24.07.2020.
- Mr. A. Logeswaran, attended an online Faculty Development Programme on 'Recent Trends and Applications of Next Generation Computing Technologies' conducted by Hindustan Institute of Technology, Chennai from 20.07.2020 to 24.07.2020
- Mr. C. Saravanan, Ms. S. Suganya, Ms. R. Maheshwari, Ms. P. Prema, Ms. R. Supriya, Ms. T. Kokilavani attended an online Faculty Development Programme on 'Android App Using Kotlin', conducted by Green ThinkerZ in Association with Spoken Tutorial Project, IIT Bombay from 26.07.2020 to 30.07.2020.
- Ms. T. Premamala, Ms. R. Maheshwari attended an online Faculty Development Programme on 'Database Management System through INFYTQ Platform', conducted by INFOSYS Campus Connect, Education, Training & Assessment, Infosys Limited from 03.08.2020 to 07.08.2020.
- Mr. A. Logeswaran, Ms. V. Gomathi attended an online Faculty Development Programme on 'Cloud Infrastructure and Services', conducted by Bannari Amman Institute of Technology, Coimbatore from 05.08.2020 to 09.08.2020
- Ms. P. Prema, Ms. N. V. Keerthana attended an online Faculty Development Programme on 'Soft Skills', conducted by Velalar College of Engineering and Technology, Erode from 17.08.2020 to 22.08.2020
- Dr. K. Ganeshkumar attended an online Training Programme on 'Python Programming' conducted by St.Martin's Engineering College, Hyderabad from 20.08.2020 to 24.08.2020.
- Mr. A. Logeswaran, attended an online Faculty Development Programme on 'Insight and Trend in Data Analytics', conducted by Karpagam College of Engineering, Coimbatore from 21.08.2020 to 26.08.2020
- Dr. K. Ganeshkumar attended an online Faculty Development Programme on 'Emerging Trends & Technologies in Data Science', conducted by GMR Institute of Technology, Andhra Pradesh from 24.08.2020 to 29.08.2020.
- Dr. S. Viveka, Ms. T. Premamala, Ms. R. Maheshwari attended an online Faculty Development Programme on 'Data Science', conducted by AICTE Training and Learning (ATAL) Academy at University of Hyderabad from 07.09.2020 to 11.09.2020.
- Mr. A. Logeswaran, attended an online Faculty Development Programme on 'Virtual Labs' conducted by NITK Suratkal & PALS IIT, Bombay from 14.09.2020 to 18.09.2020
- Ms. T. Nithya, Mr. C. Saravanan, Ms. V. Leela, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. T. Kokilavani attended an online Faculty Development Programme on 'Data Sciences' conducted by University College of Engineering from 05.10.2020 to 09.10.2020
- Ms. V. Gomathi, Ms. P. Prema, Ms. D. Suganya, Ms. N.V. Keerthana attended an online Faculty Development Programme on 'Formal modeling, control & Real Time implementation of Cyber Physical Systems' conducted by VSB engineering college, Karur from 19.10.2020 to 02.11.2020

Short Term Training Program

- Ms. T. Premamala, Ms. P. Prema, Ms. D. Suganya, Ms. R. Supriya, Ms. N. V. Keerthana attended a AICTE sponsored Short-Term Training Program on 'Deep learning Applications and challenges in Big data Analytics', conducted by Velalar College of Engineering and Technology, Erode from 11.08.2020 to 16.08.2020
- Mr. A. Logeswaran, Ms. D. Suganya attended a Short-Term Training Program on 'Cyber Security & Forensic', conducted by Sri Aurobindo Institute of Technology, Indore from 24.08.2020 to 29.08.2020
- Dr. K. Ganeskumar, attended a Short-Term Training Program on 'Most Practiced key Software's for Cloud Computing and Big Data' conducted by Velammal College of Engineering and Technology, Madurai from 21.09.2020 to 25.09.2020
- Dr. S. Viveka, Ms. T. Premamala, Mr. C. Saravanan, Mr. A. Logeswaran attended a Short-Term Training Program on 'Federated Identity Management System: Research Perspectives' conducted by Dr. Mahalingam College of Engineering and Technology, Pollachi from 21.09.2020 to 26.09.2020
- Ms. V. Gomathi, Ms. P. Prema, Ms. N. V. Keerthana attended a Short-Term Training Program on 'Writing and Publishing High impact research publications and scientific Documents', conducted by Rajalakshmi Engineering College, Chennai from 21.09.2020 to 26.09.2020
- Ms. V. Gomathi, Ms. P. Prema, Ms. N. V. Keerthana attended a AICTE sponsored Short-Term Training Program on 'Supervised and Unsupervised machine learning using Google Cloud', conducted by RMK College of Engineering and Technology, Chennai from 12.10.2020 to 17.10.2020
- Dr. R. Mynavathi, Mr. C. Saravanan, Ms. S. Kiruba, Mr. A. Logeswaran, Ms. T. Kokilavani attended a AICTE sponsored Short-Term Training Program on 'Writing and Publishing High Impact Research Publications and Scientific Document', conducted by Rajalakshmi Engineering college, Chennai from 19.10.2020 to 24.10.2020

VIRTUE-STUDENT MAGAZINE

ROBOTIC CARS:

An autonomous car, also known as a robotic car, self-driving car, or driverless car is a vehicle that is capable of sensing its environment and moving with little or no human inputs. The development race for self-driving cars was the major fodder for news channels around the world in 2017. The concept of self-driving cars has attracted some big corporations such as Google, Tesla, Mercedes and more in an arms race for introducing the first driver-less cars on the road.



Autonomous cars combine a variety of sensors to perceive their surroundings, such as radar, Lidar, sonar, GPS, odometry and inertial measurement units. Advanced control systems interpret sensory information to identify appropriate navigation paths, as well as obstacles and relevant signage.

The driver can safely turn their attention away from the driving tasks, e.g. the driver can text or watch a movie. The vehicle will handle situations that call for an immediate response, like emergency braking. The driver must still be prepared to intervene within some limited time, specified by the manufacturer, when called upon by the vehicle to do so.

-K.S. Nakulan, III-IT-B

ARTIFICIAL INTELLIGENCE:

Artificial Intelligence refers to the intelligence of machines. This is in contrast to the natural intelligence of humans and animals. With Artificial Intelligence, machines perform functions such as learning, planning, reasoning and problem-solving. Most noteworthy, Artificial Intelligence is the simulation of human intelligence by machines. It is probably the fastest-growing development in the World of technology and innovation. Furthermore, many experts believe AI could solve major challenges and crisis situations.



Types of Artificial Intelligence

First of all, the categorization of Artificial Intelligence is into four types. Arend Hintze came up with this categorization. The categories are as follows:

Type 1: Reactive machines – These machines can react to situations. A famous example can be Deep Blue, the IBM chess program. Most noteworthy, the chess program won against Garry Kasparov, the popular chess legend. Furthermore, such machines lack memory. These machines certainly cannot use past experiences to inform future ones. It analyses all possible alternatives and chooses the best one.

Type 2: Limited memory – These AI systems are capable of using past experiences to inform future ones. A good example can be self-driving cars. Such cars have decision making systems. The car makes actions like changing lanes. Most noteworthy, these actions come from observations. There is no permanent storage of these observations.

Type 3: Theory of mind – This refers to understand others. Above all, this means to understand that others have their beliefs, intentions, desires, and opinions. However, this type of AI does not exist yet.

Type 4: Self-awareness – This is the highest and most sophisticated level of Artificial Intelligence. Such systems have a sense of self. Furthermore, they have awareness, consciousness, and emotions. Obviously, such type of technology does not yet exist. This technology would certainly be a revolution.

AI can greatly increase the rate of work in manufacturing. Manufacture of a huge number of products can take place with AI. Furthermore, the entire production process can take place without human intervention. Hence, a lot of time and effort is saved.



Artificial Intelligence has applications in various other fields. These fields can be military, law, video games, government, finance, automotive, audit, art, etc. Hence, it's clear that AI has a massive amount of different applications.

To sum it up, Artificial Intelligence looks all set to be the future of the World. Experts believe AI would certainly become a part and parcel of human life soon. AI would completely change the way we view our World. With Artificial Intelligence, the future seems intriguing and exciting.

-J.P.Shabeela, IV-IT-A

CLOUD COMPUTING:

Everyone has a basic idea about the cloud computing, they thought that it's a very big thing. Exactly it is a big thing but it is easy to understand. For example, In case you need a laptop with some application to do some work but you don't have it. Now you need a help from your friend or else someone. You have to borrow from them and install relative software in it and then you will work on it. It is enough for a single person. If you are doing this work for a big client then atleast you need 10 to 20 computers, RAM, hard disks and license for each software which includes cost but it is not permanent, just for a couple of days. So here appears the concept of cloud computing.



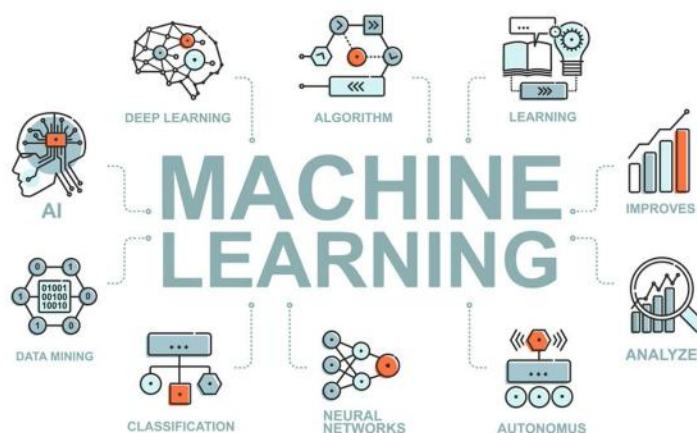
Cloud computing is described as “Pay for what we are doing”. Microsoft, Google and amazon are some cloud service providing companies. While using the cloud services data that are used in your system is not stored in your hard disk, it is stored virtually. For example, Facebook, whatsapp, gmail and online transaction are using cloud computing services.

G.Devika, II-IT-A

MACHINE LEARNING: A CONTEMPORARY LEARNING:

The level of advancement and achievement in science and technology is Machine Learning (ML) and its algorithm which is one of the application of artificial intelligence (AI). ML algorithm is famous the a non-ML algorithm because a non ML algorithm need data and program to get a output. But in ML algorithm, training data is given as input and the program will be its output. Its quite interesting right.

In ML, learning is the ability to improve the behavior (i.e. Model) based on experience. So in ML system, an experience/data is feed into a learner along with background knowledge of training data to synthesis a model. Models are borrowed from statistics and probability theory. When a task is give to ML system then reasoned will use the model to bring the output. More models are available in ML and these models are code up using Python, R, Lisp, Prolog and Java.



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