

April 2022

IcfaiTech NEWSLETTER



INSIDE THIS ISSUE:

CAMPUS HAPPENINGS INDUSTRIAL VISIT FACULTY ACHIEVEMENT STUDENT ACHIEVEMENT FACILITATING ASPIRANTS

FROM THE DEAN'S DESK

IcfaiTech, Hyderabad is emerging as an institute renowned to train students to become professionals revered by the industry. Leveraging the contemporary curriculum, our institution empowers the learners to embark on an erudite journey that transforms them into mavens. Here at IcfaiTech, Hyderabad, we allow students to prosper, and learn skills through experiences. They are exposed to several professional workshops, internships, and events. This month, our students got the opportunity to socialize with the Alumni who are leading the industries by exhibiting incredible performances. Further, our faculty members are relentlessly advancing their skills through faculty development programmes. They are also showcasing their flair for research by providing solutions to problems confronted by society. I welcome the readers to glimpse through the happenings that manifested in an eventful month.



~ Prof. A. Vadivel, Dean, IcfaiTech, Hyderabad

CAMPUS HAPPENINGS Alumni Meet 2022

IcfaiTech, Hyderabad hosted Alumni Meet on 9th April 2022 at IBS Auditorium, IFHE Campus. The campus breathed with grandeur and fervour while welcoming the students who spent their learning years at IcfaiTech, Hyderabad. Ms. Shoba Rani, Dr. V. P. Rao, Dr. Bidyut K. Bhatttacharya, Dr. K. L. Narayana, and Dr. A. Vadivel graced the occasion and extended their warmest gratitude to the students who have engraved the title of IcfaiTech, Hyderabad in the global forum through their outstanding achievements.

The day commenced with the auspicious lighting of the lamp and offering of prayers followed by the presidential address. Subsequently, a corporate film on the proceedings of IcfaiTech, Hyderabad was shown to acquaint the Alumni with the journey of the Institution since the years of their graduation. Further, Chief Guest - Aamir Sharma, Architect, Hyderabad, addressed the students with an invigorating speech.

The 128 brilliant minds who traversed miles to visit their Alma Mater shared their experiences and enjoyed the cultural events followed by sumptuous meals, campus tours, and fun activities. The fervent student volunteers were appreciated for their involvement and dedication to magnificently organize this event that brought them close to the alumni and encouraged them to walk the path of success.











CAMPUS HAPPENINGS

Flaunting tradition elegantly

The student-run Asana Club of IcfaiTech, Hyderabad organized ETHNIC DAY on 27th April 2022 at the FST Grass Area. Students. faculty, and staff members exuberated elegance in their traditional attire and participated in fun games and activities. *Events* including "Mehandi Laga Ke Rakhna", "Stand-up Comedy", "Dahi Handi", "Musical Chair". "Photo Session", and "D7 Ramp Walk" made the day memorable and allowed the students to relish mingling with their peers.



Events including "Mehandi Laga Ke Rakhna", "Stand-up Comedy", "Dahi Handi", "Musical Chair", "Photo Session", and "DJ Ramp Walk" made the day memorable and allowed the students to relish mingling with their peers.

CAMPUS HAPPENINGS "Deep Learning approaches for 5G and Software Defined Networks"

IcfaiTech, Hyderabad organized an online Faculty Development Programme on "Deep Learning approaches for 5G and Software Defined Networks" on 4th- 8th April 2022. Coordinated by Dr. P. Rohini and Dr. Sathya A. *R*... the FDP catalyzed relevant talks. discussions, and debates eliciting an engaging program. This FDP was designed to provide the participants with an exposure to AI & Data monopoly, fundamentals of machine learning and deep learning. convolutional neural networks, basics of 5G and SDN, DL & ML Approaches for IRS in 5G and Beyond, GPU clustering, security issues in 5G, etc.

Deep learning is a powerful AI approach that uses multi-layered artificial neural networks to deliver state-of-the-art accuracy in tasks such as object detection, speech recognition, and language translation. Using deep learning, computers can learn and recognize patterns from data that are considered too complex or subtle for expert-written software. The evolution of wireless networks from the first to the fourth generation has made smart devices and technologies a significant part of our daily activities. The 5G network is a ground-breaking technology that proposes to transform the way individuals use the internet, via the creation of enabling atmosphere. 5G promises faster and superior quality with a better security guarantee comparison to preceding technologies. in Software-Defined Networking (SDN) has emerged as a new intelligent architecture for network architecture to reduce hardware limitations. SDN is introduced to separate the control plane outside the switches and enable external control of data through a logical software component called the controller. SDN provides simple abstractions to describe the components, the functions they provide, and the protocols to manage the forwarding plane along with Mobile IP from a remote controller via a secure channel.





A Five-Day Online Faculty Development Program on Deep Learning approaches for 5G and Software Defined Networks

4th - 8th April 2022

Call for Registration and Participation Coordinators Mrs. P. Rohini Mrs. Sathya A.R



Organized by the Department of Data Science and Artificial Intelligence IcfaiTech Hyderabad-501203

Eminent personalities and experts from. renowned Indian & foreign universities and industries delivered lectures. Dr. Parimala K, Research Scientist, Intel Labs, Dr. L. Pratap Reddy, Professor, JNTUH, Ms. Kavya, SDE, Amazon, USA, Mr. Tarun Pulluri R & D Engineer, Philips Singapore, Ex. National University of Singapore, SUDT Singapore, Dr. Praveen Tammana Assistant Professor, IITH, Mr. Murali K Data Scientist, Gramener, Mr. Praveen G. Executive Member, Swecha, Researcher, IoT Labs, BITS, Mr. Praveen Chandrahas, Secretary Swecha, Alumni IITM, Ex: Office Principal, Thought works, Cisco, Dr. Padmaja Rani Professor, FNTUH, Dr. Pragathi Shrivastava, Assistant Professor, BITS-Pilani, Hyderabad. Dr. Sandeep Joshi Assistant Professor, BITS-Pilani, Hyderabad, and Dr. A Vadivel Dean, IcfaiTech, Hyderabad orated during the workshops and addressed emerging trends and technologies pertaining to the domain.

CAMPUS HAPPENINGS FDP to enhance communication skills

Department of English and Mathematics, IcfaiTech, Hyderabad has organized a workshop on "Public Speaking and Presentation Skills" on 28th and 29th April 2022. Eminent orators including Dr. Dipak T. Morey, HCU, Hyderabad, Dr. UpenderMaloth, University, Warangal were invited to conduct this workshop along with the faculty members of IcfaiTech, Hyderabad - Dr. Loreina Pagag and Dr. Swathi Mulinti. Enabling the attendees to emerge as better public speakers, the workshop empowered the audience to devise strategies fostering stronger presentation skills, and effective communication skills.



Leveraging on the demonstration of impactful presentation followed by the practice session, the students and faculty members enhanced the imperative skills that would contribute in towards a thriving career.

CAMPUS HAPPENINGS

Mr. Amit Pal delivering a lecture on "Product Design and Development"

Department of ECE. IcfaiTech, Hyderabad invited Mr. Amit Pal, Senior Research Fellow, NIT - Trichy, Tamil Nadu to deliver a guest lecture on "Product Design and Development". On 29th April 2022. Mr. Amit Pal narrated the importance of product development in any industry. From analyzing the current market to the launch of the final product, it is imperative to monitor each stage to deliver the desired outcomes. He also informs that it entails sales and marketing, finance, and logistics and the entire cycle requires an exhaustive team of product designers, engineers, UX designers, technical staff, and interaction designers to work diligently on the development of the product.



This insightful lecture enabled the audience to comprehend the prominence of this domain as well as the various job opportunities that come along with it, hence, facilitating them to pursue the career that will optimize their competencies.

CAMPUS HAPPENINGS Departmental Seminar

Title: Fundamental Understanding of Deep Learning and Neural Networks

Speaker: B.Hamsini, Nishita Evantikar, students

Department:Department:OpportmentofComputerScienceandEngineering and Department ofDataScienceandArtificialIntelligence(DS & AI)

Date: 28 March 2022

Abstract: Artificial Neural Networks (ANN's), networks layers, sequential models, activation functions, training and learning the neural network, training, testing and validation datasets, overfitting, underfitting, supervised, unsupervised and semisupervised learning, Convolutional neural networks and backpropagation. *Title:* Fixed Point Results for Orthogonal G-F- Contraction mappings on O-complete Gmetric spaces

Speaker: Dr. G Sudhaamsh Mohan Reddy

Department: Department of Mathematics

Date: April 21, 2022

Abstract: In this manuscript, we introduce the notion of an orthogonal G-F- contraction mapping and establish fixed point results for such contraction mappings in orthogonally G- metric spaces.

INDUSTRIAL VISIT

IcfaiTech, Hyderabad arranged for an industrial visit for the students pursuing Mechatronics Engineering. 29 students accompanied by 3 faculty members and 2 laboratory staff visited Nuclear Fuel complex Hyderabad on 26th April 2022. Nuclear Fuel Complex, Hyderabad is an industrial unit of the Department of Atomic Energy, Government of India. NFC is the only organization in India that caters to the fuel requirements of nuclear power reactors. An ISO-certified organization, NFC is the only organization in the world to have a comprehensive manufacturing cycle from ore to core, involving the processing of both Uranium & Zirconium streams under the same roof.

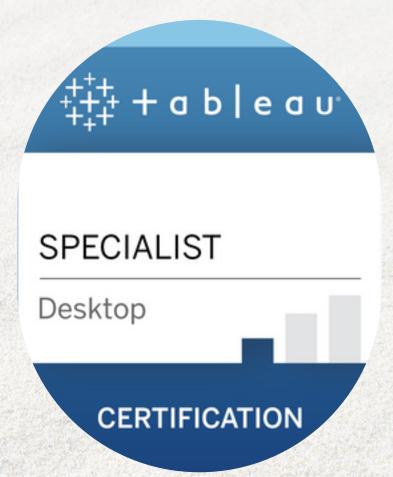
During the industrial visit, the students were acquainted with the manufacturing of nuclear fuel bundles for Pressurized Heavy Water Reactors (PHWR), Boiling Water Reactors (BWR), Fast breeder reactors, many reactor core components, various tubes, high purity special materials, etc.

They also witnessed the state-of-art facilities and process technologies with several innovations in the field of nuclear fuel production and fabrication as well as several types of production facilities which include Zirconium Oxide Plant for processing of Zircon to nuclear grade Zirconium oxide, Zirconium Sponge Plant for conversion of Zirconium oxide to nuclear grade sponge metal, Melt Shop Plant for production of zirconium alloys, Extrusion and Piercing Plant for hot extrusion and expansion of different alloys and special materials into various shapes and sizes, Zircaloy Fabrication Plant for producing various zirconium alloy tubes. sheet, rod and wire products, Uranium Oxide Plant for processing crude uranium concentrates to pure uranium dioxide powder. Ceramic Fuel Fabrication Plant for producing Uranium oxide pellets and assembling of the fuel bundles for the PHWRs, and Fast Reactor Facility Plant for fabrication of components and subassemblies for Fast Breeder Reactors.



STUDENT ACHIEVEMENT

Kondamuri Sri Jashwanth Baba, Department of Computer science and Engineering is pursuing an Internship at Goldstone Technologies Limited as part of the curriculum of IcfaiTech, Hyderabad. Supervised by Dr.Sirisha Potluri, Assistant Professor, Department of Computer Science and Engineering, IcfaiTech, Hyderabad, the prodigious student completed his certification on "Tableau Desktop Specialist certification". Goldstone Technologies Limited specializes in Full-Stack Business Intelligence, Data Analytics, and IT Services Consultancy.



Jashwanth's stint at Goldstone Technologies and the certification will enable him to gain knowledge imperative to succeed in his career and become a global professional.

FACULTY ACHIEVEMENT Dr. P. Rohini provides medical solutions

Professor, Dr. Rohini, Assistant *P*. of Data Science and Department Artificial intelligence, IcfaiTech, Hyderabad published a paper on "Frequency domain adaptive learning thoracic algorithm for electrical bioimpedance enhancement" the in Journal - Computers, Materials & Continua. The paper presents a new block-based adaptive learning scheme to remove artifacts from Thoracic Electrical Bioimpedance (TEB) signals in a clinical scenario. The TEB helps to determine the stroke volume during cardiac arrest. While measuring cardiac signals, it is with artifacts. contaminated The commonly encountered artifacts are Baseline wander (BW) and Muscle artifact (MA), these are physiological and non-stationary. As the nature of these artifacts is random, adaptive filtering is needed more than conventional fixed coefficient filtering techniques.

The proposed block least mean square (BLMS) algorithm is mathematically normalized with reference to data and error. This normalization leads, block normalized LMS (BNLMS) and block error normalized LMS (BENLMS) algorithms. Various adaptive artifact cancellers are developed in both time and frequency domains and applied to real TEB quantities contaminated with physiological signals.



ability of these techniques The is measured by calculating signal to noise ratio improvement (SNRI), Excess Mean Square Error (EMSE). and Among Misadjustment (Mad). the considered algorithms, the frequency domain version of the BENLMS algorithm removes the physiological artifacts more effectively than the other counterparts. Hence, this adaptive artifact canceller is suitable for real time applications like wearable, remote health care monitoring units, etc.

FACULTY ACHIEVEMENT

Dr. Sirisha Potluri presents research papers at International Conferences

Dr.Sirisha Potluri, Assistant Professor, Department of Computer Science and Engineering, IcfaiTech. Hyderabad presented a paper titled "Optimized Test Coverage with Novel Particle Swarm Bee Colony and Firefly Cuckoo Search Algorithms in Model Based Software Testing" at the "International Conference on Artificial Intelligence Trends and Pattern Recognition (ICAITPR) – 2022", cosponsored by IEEE Hyderabad. The software testing process is vital in the software industry to obtain high-quality software. For the last four decades. several techniques for software testing were recommended to guarantee high-quality software delivery by satisfying all the client requirements. Model-based testing is a great breakthrough in the field of software test automation and is based on automatic test case generation through various models. Though we have several model based testing models available in the literature, in this research an optimized novel approach is proposed by using Particle swarm bee colony and Firefly cuckoo search algorithms. One of the best substantial advantages of the proposed model is that it optimizes the time and cost involved in the software testing process. By using this approach, we can ensure automatic test case creation and execution to make the overall testing process more efficient by reducing errors. Another improvement of the proposed work is that it produces the required number of test cases to test and ensure the system that it works undergoes perfectly and never undesirable performance. Obtaining the required number of test cases is promoting the proposed model for cost optimization in software testing.



Further, Dr. Sirisha presented a paper titled "Suppression of COVID-19 outbreak: an early lesson using real life monitoring" at the "International conference on industry 4.0 (ICI4)-2022" organized in Abu Dhabi, Dubai, UAE. "COVID -19," formerly known as "2019 Novel Corona Virus," is a contagious disease that affects the majority of people around the world. Early detection and diagnosis of severe pneumonia allow for more intensive supportive care therapies and treatments, such as admission to a COVID treatment facility. ECG monitors, activity trackers, blood flow sensors, and smartwatches, among other wearable gadgets, can provide unique insights into our fitness and health. Wearable and real-time health monitoring technologies have been created in stages during the COVID-19 outbreak. We might greatly improve diagnosis performance by adding the found correlations between biological markers and our physiological state without needing access to large training datasets. The recommended methodologies' prospective capabilities could potentially improve and extend the use of emerging low-cost and efficient wearable gadgets. Our research aims to supply all of these characteristics in order to obtain early lesions utilizing real-time monitoring in order to control the COVID-19 epidemic using an efficient algorithmic decision-making method embedded in wearable devices to gain better diagnostic results.



FACULTY ACHIEVEMENT

Dr. A. Manmadha Chary conducts training on 3D printing

Dr. A. Manmadha Chary, Assistant Professor, Department of Mechatronics Engineering, IcfaiTech, Hyderabad was invited by Design Prototyping Centre & Division, Engineering Staff College of India (ESCI), Hyderabad to host a training session titled "Basics of Design for Additive Manufacturing & Applications of AM in Automotive, Aerospace, and Medical domains" during the five-day Continuing Professional Development Programme (CPDP) on "3D Printing in Manufacturing" that commenced on 25th April 2022 and continued till 29th April 2022. Dr. Manmadha's interesting training facilitated the audience to gain imperative insights enhancing their skills and knowledge pertaining to the emerging domain.



FACILITATING ASPIRANTS

IcfaiTech, Hyderabad İS offering an opportunity for the aspiring Π vear Intermediate (plus 2)students to the ace forthcoming Engineering Agricultural and Medical Entrance Test Common (EAMCET) by enabling them to appear for complimentary (no registration fee) mock tests on the 23rd, 25th, and 27th May 2022. EAMCET is an entrance examination held in Andhra Pradesh and Telangana for admitting students into various colleges in the streams of Engineering, Medicine, and Agriculture. Several students hoth the across aforementioned states aim to champion EAMCET and study in an institution offering quality education.



IcfaiTech, Hyderabad is empowering young minds to embark on their dream erudite journey by facilitating them to prepare for the competitive examination.







Website: https://www.ifheindia.org/icfaitech/

Facebook: https://www.facebook.com/lcfaiTech/

LinkedIn: https://in.linkedin.com/company/icfaitech 0

IcfaiTech, IFHE Campus Dontanpally, Shankarpally, R R District, Hyderabad - 501 203.

admissions.icfaitech@ifheindia.org

Phone : 040-23479725 / 040-23479732 Mobile: 8499848444 Call/Whatsapp: 9010377002

Editorial Team: Dr. K. L. Narayana, Director, IcfaiTech Dr. A. Vadivel, Dean, IcfaiTech Dr. Rashmi Sahay, Asst. Prof.-CSE, IcfaiTech Ms. Manoswita Dasgupta, Content Writer, IcfaiTech