Vol 17

Dec 2022

IcfaiTech Newsletter

Highlights:

- Faculty Achievements
- Campus Happenings
- Promoting IcfaiTech
- Welcoming Faculty

From the Director's Desk

IcfaiTech, Hyderabad fosters a milieu apt for intellectual enhancement with contemporary pedagogy, a research-oriented approach, and relevance-based practices. A glimpse of this vibrant erudite experience encompasses the newsletters I am delighted to present to our avid readers every month.

This month, milestones have been achieved. Our faculty members have enhanced their expertise, participated in webinars, were invited to deliver guest lectures, presented papers, and received awards. Our effervescent campus witnessed several events rejoiced by the students as well as the faculty. Further, we have welcomed prodigious faculty members to our IcfaiTech family, this month. The December chapter of the newsletter embodies the achievements of the faculty members, a peek into the life at our campus, and much more.

~ Dr. K.L. Narayana
Director, IcfaiTech, Hyderabad

Faculty Achievements

Dr. Movva Pavani, Assistant Professor, Department of ECE received a certificate of appreciation for reviewing research articles.
Journal: Imaging Science Journal
Publishing House: Taylor & Francis for the Year 2022

Dr. Soumit Samadder Chaudhury , Assistant Professor, Department of ECE, presented a paper at the IEEE Microwave Antenna and Propagation Conference (MAPCON) 2022
Date: 13th December 2022

Title: Independent Control Over the Passband of Bandpass Filter Based on Semi-Circular Mushroom Loaded Substrate Integrated Waveguide
Abstract: This paper presents a method to control the passband of a bandpass filter by independently varying the bandwidth (BW) and center frequency (CF) of the bandpass filter which is based on a circular substrate integrated waveguide (SIW) loaded with two cascaded

semi-circular mushroom resonators (ScMRs). The dimensions of two mushroom vias are varied within a range of 0.6 mm to affect the resonance frequency of the cascaded mushroom resonators and consequently shift the center frequency of the passband by more than 6.5% keeping the passband bandwidth undisturbed. The internal capacitive coupling between the two cascaded ScMRs across the slot gap is varied by changing the slot width by 0.3 mm, which consequently establishes a control over the passband bandwidth and changes the 3dB fractional bandwidth independently by more than 6.6%. A simulative study shows that the proposed filter occupying a compact area of 0.3 $\lambda 0 \times 0.3 \lambda 0$ has the passband centered at 2.3 GHz with a minimum insertion loss of 0.7 dB.

Dr. Thokala Soloman Raju, Assistant Professor, Department of Physical Sciences and Dr T Shreecharan, Assistant Professor, Department of Physical Sciences published a research paper.

Journal Name: International Journal of Theoretical Physics
Title: Dynamics of nonautonomous matter waves in ``exotic'' transient trap variations
Impact factor: 1.307
Indexed: Web of Science, SCIE Journal, Scopus
Publisher: Springer Nature
Abstract: In this paper, we study the controllable behavior of nonautonomous matter waves in different ``smart'' transient trap variations in the context of the cigar-shaped Bose-Einstein condensates. By utilizing a self-similarity transformation we reduce the nonautonomous Gross-Pitaevskii (GP) equation to the elliptic equation that admits soliton solutions. This procedure leads to a consistency equation which is in the form of Riccati equation. The connection between the Riccati and the linear Schr\"odinger equation, through the Cole-Hopf transformation, is exploited profitably here to introduce temporal trap variations. For our study, we explore the possibility of using one dimensional exactly solvable (ES) potentials and their newly constructed rational extensions, as functions of time to introduce interesting temporal trap modulations. The fact that the regular potentials and their rational extensions being

structurally different, leads to different temporal modulations. It is exhibited that the soliton behavior with respect to compression in both of these cases is quite different.

Dr. Thokala Soloman Raju, Assistant Professor, Department of Physical Sciences presented a paper at an international conference.

Name of the Conference: 6th Workshop on Optics and Photonics: Theory and Computational Techniques (OPTCT) 2022

6th Workshop on
OPTICS AND PHOTONICS:
THEORY AND COMPUTATIONAL TECHNIQUES (OPTCT)

Certificate of Participation

This is to certify that

THOKALA SOLOMAN RAJU
ICFAI FHE Hyderabad

participated in the 6th **Workshop on Optics and Photonics: Theory and Computational Techniques (OPTCT)** during December 26-27, 2022 organized online by Optics and Photonics Center, Indian Institute of Technology Delhi, New Delhi and presented a paper entitled:

Butterfly-shaped and Dromion-like Optical Similaritons in Asymmetric Twin-core Waveguide

(Anurag Sharma)
Convenor
Optics and Photonics Center
Indian Institute of Technology Delhi
New Delhi – 110 016

Workshop Committee

Anurag Sharma (IIT Delhi), L.N. Hazra (Calcutta University), Kedar Khare (IIT Delhi), S. Anantha Ramakrishna (IIT Kanpur/CSIR-CSIO, Chandigarh), Vipul Rastogi (IIT Roorkee), P. Roy Chaudhury (IIT Kharagpur), Enakshi K. Sharma (University of Delhi South Campus), R.K. Varshney (IIT Delhi)

Organized by

Supported by

Organizers: Indian Institute of Technology, Delhi

Dates: 26-27 December 2022

Title of the presentation: Butterfly-shaped and Dromion-like Optical Similaritons in Asymmetric Twin-core Waveguide

Abstract: Butterfly-shaped and dromion-like optical waves in a tapered graded-index waveguide (GRIN) with an external source are reported for the first time. The generalized nonlinear Schrödinger equation, which describes self-similar wave propagation in GRIN with variable group-velocity dispersion (GVD), nonlinearity,

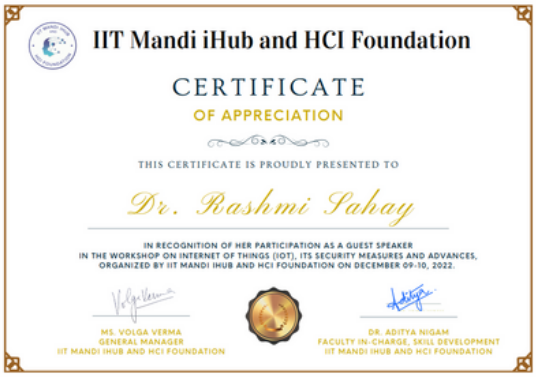
gain, and source is investigated and analytical solutions for this dynamical system are obtained. Under certain physical conditions, we reduce the coupled nonlinear Schrodinger equations to single wave equation that aptly describes similariton propagation through asymmetric twin-core fiber amplifiers. The asymmetric twin-core fiber is composed of two adjoining, closely spaced, single mode fibers in which the active one is a tapered, graded-index nonlinear-fiber and the passive one is a step-index fiber. The physical effects affecting these waves are explicated in detail. The stability of dromion-like structures is analyzed when the GVD parameter is perturbed. We have observed oscillation structure exhibiting strong interference due to this applied perturbation. For a particular value of the modulation of the GVD parameter, the oscillation structure is transformed into two dromion-like structures. It indicates that the dromion-like structure is unstable, and the coherence intensity is affected by the modified perturbation parameter. We further demonstrate the phenomenon of unbreakable $\mathcal{PT}$ symmetry of these novel nonlinear waves for three explicit examples.

Dr. Rashmi Sahay, Assistant Professor, Department of Computer Science Engineering received a certificate of appreciation for participating in a workshop as a guest speaker.

Workshop Title: Internet of things, its security measures and advances in HCI applications

Organizers: IIT Mandi iHub and HCI Foundation

Date: 9th-10th December 2022


IIT Mandi iHub and HCI Foundation

CERTIFICATE

OF APPRECIATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Dr. Rashmi Sahay

IN RECOGNITION OF HER PARTICIPATION AS A GUEST SPEAKER
IN THE WORKSHOP ON INTERNET OF THINGS (IOT), ITS SECURITY MEASURES AND ADVANCES,
ORGANIZED BY IIT MANDI IHUB AND HCI FOUNDATION ON DECEMBER 09-10, 2022.

MS. VOLGA VERMA
GENERAL MANAGER
IIT MANDI IHUB AND HCI FOUNDATION

DR. ADITYA NIGAM
FACULTY IN-CHARGE, SKILL DEVELOPMENT
IIT MANDI IHUB AND HCI FOUNDATION

Dr. Movva Pavani, Assistant Professor, Department of ECE contributed as a reviewer of research articles for an international journal.

Journal title: International Journal of Advanced Computer Science and Applications (IJACSA) for the year 2021 and 2022


The Science and Information (SAI) Organization Ltd
Summit House, Woodland Park,
Bradford Road, Cleckheaton,
BD19 6BW, West Yorkshire,
United Kingdom

SAI
The Science and Information Organization

19 December 2022

To whom it may concern,

This letter is to confirm that **Dr. Movva Pavani,** has contributed to International Journal of Advanced Computer Science and Applications (IJACSA) as a Reviewer.

We thank Dr. Movva Pavani for thorough and timely review of the following manuscript,

---

Dr. Movva Pavani, Assistant Professor, Department of ECE participated in the "Two Days FDP on Hands on Session on Open Source VLSI Tools (Online)", organized by the School of Electronics Engineering VIT-AP University, Amaravati on 20th – 21st December, 2022


VIT-AP UNIVERSITY

Apply Knowledge, Improve Life!

Certificate of Participation

This is to certify that

Dr.Movva Pavani

ICFAI Foundation for Higher Education, Faculty of Science and Technology(IcfaiTech)

has successfully participated in the **"Two Days FDP on Hands on Session on Open Source VLSI Tools (Online)"**, organized by the School of Electronics Engineering VIT-AP University, Amaravati on 20th - 21st December, 2022.

Dr. Rohit Lorenzo
Coordinator
VIT-AP University

Dr. Umakanta Nanda
Dean, SENSE
VIT-AP University

Dr. A. Chandrasekhar, Assistant Professor, Department of Mechatronics attended a Faculty Development Programme.
FDP Title: Kinematic Analysis of Robot Mechanisms: Fundamentals
Organized by: Centre for AI, IoT, and Robotics, IIIT, Design and Manufacturing, Chennai
Date: 9-15th Dec


Centre for AI, IoT, and Robotics
IIITDM Kancheepuram, Chennai-600127
Certificate of Participation
One Week Online Faculty Development Program (FDP) on
"Kinematic Analysis of Robot Mechanisms: Fundamentals"
*****
This is to certify that Dr. A Chandrashekhar, Faculty of Science & Technology, ICFAI Foundation for Higher Education, Hyderabad, has participated in the online FDP organized during 9-15 December 2022 by the Centre for AI, IoT, and Robotics, Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, Chennai-600127.
Prof. M. Sreekumar
Program Coordinator & Centre Head
Dr. Jayavel S
Dean-SRICCE
Prof. M. V. Karthikeyan
Director

Dr. Pradosh Kumar Gantayat, Assistant Professor, Department of CSE has received a certificate of appreciation for reviewing the papers submitted in the 2nd international Conference on Advanced Network Technologies and Intelligent computing (ANTIC-2022)
Organizer: Dept. of Computer Science, Banaras Hindu University, Varanasi, India
Conference Date: Dec 22-24.


ANTIC 2022
2nd International Conference on Advanced Network Technologies and Intelligent Computing (ANTIC-2022)
22-24 December, 2022
Organized By:
Department of Computer Science, Institute of Science, Banaras Hindu University, Varanasi, India
CERTIFICATE OF APPRECIATION
This certificate is proudly presented to
Prof./Dr./Mr./Ms. PRADOSH KUMAR GANTAYAT
for the tremendous effort and contribution as
Reviewer
in the 2nd International Conference on Advanced Network Technologies and Intelligent Computing (ANTIC-2022) organized by Department of Computer Science, Institute of Science, Banaras Hindu University, Varanasi, India in hybrid mode during December 22-24, 2022.
Prof. Vivek Kumar Singh
Head of The Department
Dept. of CS, BHU Varanasi
Dr. Anshul Verma
Convener, ANTIC-2022
Dept. of CS, BHU Varanasi

Dr. Rashmi Sahay, Assistant Professor, Dept. of CSE successfully organized, and conducted workshop in IEEE ANTS 2022.
Workshop Title: FogPlat: Workshop on Fog Computing based Security Frameworks for IoT Botnet Attack Prevention and Detection
Date: 18th December 2022

Brief Overview: The vision of the workshop was to create a forum of researchers in the field of Cloud Computing, Fog Computing, the Internet of Things (IoT), Industrial IoT, and Security. The workshop aimed to attract the following audience:

- Researchers and Academician in the field of network security, information security and data security.
- Researchers working in the field of Cloud/Fog/Edge Computing for IoT Security and Privacy.
- Researchers working in the field of Blockchain, AI driven Fog Computing based frameworks for Botnet analysis, detection, and prevention.
- Researchers working in the field of vulnerability assessment of IoT networks against Botnet attack.
- Adversarial attacks in data and security analytics of large scale constrained networks .

During the workshop in IEEE International Conference on Advanced Networks and Telecommunications Systems, there were three paper presentations from authors of BITS-Pilani, Hyderabad Campus, NIT Raipur, and Bennett University. Papers presented in the workshop will be published along with the main conference proceeding in IEEE xplore. Along with the three paper presentations, the workshop also had two talk sessions by Dr. Tanmay Bhowmik form PDEU, Gandhinagar and Dr. Rashmi.

Dr. Sirisha Potluri, Assistant Professor, Department of CSE published 2 book chapters.

1. Title: A Systematic Review of AI Privileges to Combat Widen Threat of Flavivirus

Published in: Springer Nature-Ambient Intelligence in Health Care. Smart Innovation, Systems and Technologies

Abstract: In order to prevent the extraordinary spread of sickness caused by Flavivirus, the healthcare business as well as public health are working tirelessly. Individual lives have been affected, but mosquito-infested public locations have made a considerable influence on the general public's health. Site adaptability, climate change, and inadequate healthcare services and surveillance all contribute to the spread of the virus. The potential dangers of this virus, on the other hand, have been uncovered through extensive and ongoing research in the healthcare business. Modern healthcare facilities may benefit from the reasoning capabilities and ever-evolving analysis techniques provided by artificial intelligence. More conclusive findings have been demonstrated in the realm of AI applications in healthcare domains such as cancer, neurology, and cardiology. A number of research works have justified the use of AI-oriented algorithms for intelligently handling unstructured and huge healthcare data. When it comes to using artificial intelligence (AI) to identify, forecast, diagnose, and treat disease using data from public health and biological databases, the current effort aims to undertake an extensive

examination. There may be issues in integrating assistive technology into the current healthcare system, as well. Because of this review, we hope that by merging AI research with clinical and public health specialists, critical knowledge may be extracted from data in order to unchain the relevant information of Flavivirus disease from its chains.

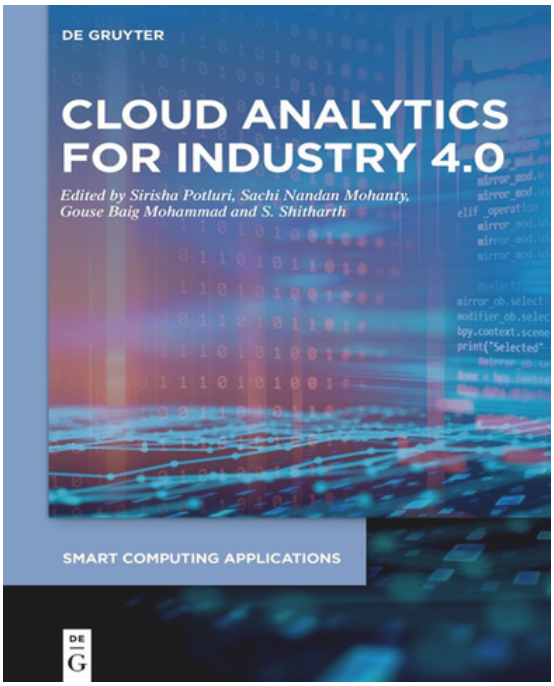
2. Title: GPS-Based Route Choice Model for Smart Transportation System: Bringing Intelligence into Vehicular Cloud
Published in: Springer Science and Business Media Deutschland GmbH, Lecture Notes on Data Engineering and Communications Technologies
Abstract: An IoT-based intelligent performance evaluation strategy is anticipated to rationalize the communication among the vehicles, manage vehicle traffic, support vehicle drivers with privacy and safety, and provision significant applications for cloud users. GPS-based route choice model is substantial for handling the transportation complications of a big city, traffic engineering, and remote communication among vehicles. With this scenario in mind, we recommend a strategy to manage and evaluate the performance of the vehicular cloud. Different types of cloud services, storage mechanisms, resources, and information management are provided to the cloud users, commercial vehicles, emergency services, and disaster services through the vehicular cloud computing model. The performance of the vehicular cloud can be raised to meet the information requirements of the cloud users by using the proposed route choice model. The primary objective of the proposed model is to provide the finest traffic light control

method using GPS inputs and vehicular area networks. An accurate traffic flow approximation method in vehicular area networks is useful to expect the amount of obtainable computational resources within a roadway subdivision given the unplanned arrivals and departures for smart transportation systems by bringing intelligence into the dynamic vehicular cloud.

Dr. Sirisha Potluri, Assistant Professor, Department of CSE edited 2 books.

1. Title: Cloud Analytics for Industry 4.0

Published by: De Gruyter in Volume 6 in the series Smart Computing Applications 2022



About the book: This book provides research on the state-of-the-art methods for data management in the fourth industrial revolution, with particular focus on cloud based data analytics for digital manufacturing infrastructures. Innovative techniques and methods for secure, flexible and profitable cloud manufacturing will be gathered to present advanced and specialized research in the selected area.

·Review of cutting-edge technologies to fill the research gaps in industrial data, analytics, people and processes.

·Advanced algorithms are mined to step forward in cloud manufacturing.

2. Title: Reconnoitering the Landscape of Edge Intelligence in Healthcare

Published by- CRC Press, Taylor & Francis Ltd

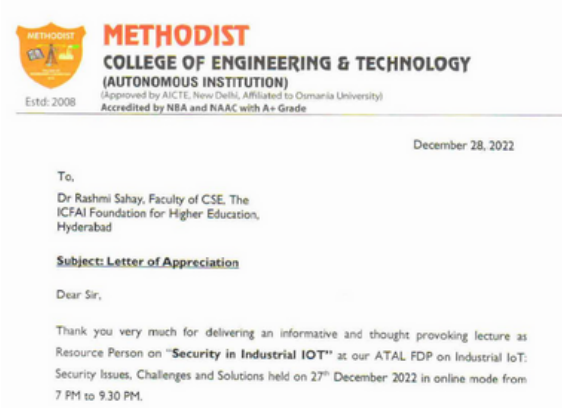
About the book: Reconnoitering the Landscape of Edge Intelligence in Healthcare provides comprehensive research on edge intelligence technology with the emphasis on application in the healthcare industry.

It covers all the various areas of edge intelligence for data analysis in healthcare, looking at the emerging technologies such as AI-based techniques, machine learning, IoT, cloud computing, and deep learning with illustrations of the design, implementation, and management of smart and intelligent healthcare systems. Chapters showcase the advantages and highlights of the adoption of the intelligent edge models toward smart healthcare infrastructure. The book also addresses the increased need for a high level of medical data security while transferring real-time data to cloud-based architecture, a matter of prime concern for both patient and doctor. Topics include edge intelligence for wearable sensor technologies and their applications for health monitoring, the various edge computing techniques for disease prediction, e-health services and e-security solutions through IoT devices that aim to improve the quality of care for transgender patients, smart technology in ambient assisted living, the role of edge intelligence in limiting virus spread during pandemics,

neuroscience in decoding and analysis of visual perception from the neural patterns and visual image reconstruction, and more. The technology addressed include energy aware cross-layer routing protocol (ECRP), OMKELM-IDS technique, graphical user interface (GUI), IOST (an ultra-fast, decentralized blockchain platform), etc. This volume will be helpful to engineering students, research scholars, and manufacturing industry professionals in the fields of engineering applications initiatives on AI, machine learning, and deep learning techniques for edge computing.

Dr. Sirisha Potluri, Assistant Professor, Department of CSE attended EAI International Conference on Intelligent Systems and Machine Learning (EAI ICISML 2022) as the session chair.
Organizer: Vardhaman College of Engineering, Hyderabad.
Date: 16th-17th December 2022

Dr. Rashmi Sahay, Assistant Professor, Dept. of CSE has been appreciated for delivering a guest lecture during ATAL FDP on Industrial IoT: Security Issues, Challenges, and Solutions.
FDP duration: 26th to 31st December 2022 (Online Session)
Organizer: Methodist College of Engineering
Lecture Title: Security in Industrial IoT
Lecture Date: 27th December 2022


METHODIST
COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS INSTITUTION)
Estd: 2008
(Approved by AICTE, New Delhi, Affiliated to Osmania University)
Accredited by NBA and NAAC with A+ Grade

December 28, 2022

To,
Dr Rashmi Sahay, Faculty of CSE, The
ICFAI Foundation for Higher Education,
Hyderabad

Subject: Letter of Appreciation

Dear Sir,

Thank you very much for delivering an informative and thought provoking lecture as Resource Person on "**Security in Industrial IOT**" at our ATAL FDP on Industrial IoT: Security Issues, Challenges and Solutions held on 27th December 2022 in online mode from 7 PM to 9.30 PM.

Dr. Rashmi Sahay, Assistant Professor, Dept. of CSE was invited to be the session chair in the 18th annual international conference on Information Assurance and Security (online).
Organizer: Machine Intelligence Research Labs (MIR Labs) - Scientific Network for Innovation and Research Excellence, Auburn, Washington, USA
Date: 14th December 2022


Machine Intelligence Research Labs (MIR Labs)
Scientific Network for Innovation and Research Excellence
Auburn, Washington, USA
18th Information Assurance and Security (IAS'22)
On the World Wide Web
Certificate of Appreciation
This is to certify that the following technical session was co-chaired online using Zoom platform during the 18th International Conference on Information Assurance and Security held on December 14-15, 2022.
Chair : Rashmi Sahay
IAS 2022 : Session 1
Date & Time : December 14, 2022; 13:00 - 16:00 GMT
On behalf of the organizing committee, we wish to thank you for your valuable support and contribution.
General Chair
Springer

Vinay Kumar Goru, administrator, attended a 2 WEEK Faculty Development Programme.
FDP Title: Drone Imaging & AI/ML Tool for Improving Decision Making in Agriculture Applications
Organized by: AICTE Training and Learning (ATAL) Academy
Date: 05th December to 16th December 2022


No: ATAL/2022/1670133580
ATAL
AICTE
ALL INDIA COUNCIL FOR TECHNICAL EDUCATION
Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070
AICTE Training and Learning (ATAL) Academy
Certificate
This is certified that VINAY KUMAR GORU, SYSTEM ADMINISTRATOR of THE ICFAI FOUNDATION FOR HIGHER EDUCATION, HYDERABAD participated & completed successfully AICTE Training And Learning (ATAL) Academy Blended/Hybrid FDP on "Drone Imaging & AI/ML Tool for Improving Decision Making in Agriculture Applications" from 2022-12-05-2022-12-10 to 2022-12-12-2022-12-16 at Chaitanya Bharathi Institute of Technology .
Advisor-I, ATAL Academy
Mamta Rani Agarwal
Coordinator

Campus Happenings

Dr. Soumit Samadder Chaudhury, Assistant Professor, ECE presented a paper during departmental seminar.

Title: Independent Control Over the Passband of Bandpass Filter Based on Semi-Circular Mushroom Loaded Substrate Integrated Waveguide

Date: 1st December 2022

Abstract: This paper presents a method to control the passband of a bandpass filter by independently varying the bandwidth (BW) and center frequency (CF) of the bandpass filter which is based on a circular substrate integrated waveguide (SIW) loaded with two cascaded semi-circular mushroom resonators (ScMRs).

The dimensions of two mushroom vias are varied within a range of 0.6 mm to affect the resonance frequency of the cascaded mushroom resonators and consequently shift the center frequency of the passband by more than 6.5% keeping the passband bandwidth undisturbed. The internal capacitive coupling between the two cascaded ScMRs across the slot gap is varied by changing the slot width by 0.3 mm, which consequently establishes a

control over the passband bandwidth and changes the 3dB fractional bandwidth independently by more than 6.6%. A simulative study shows that the proposed filter occupying a compact area of 0.3 λ 0 × 0.3 λ 0 has the passband centered at 2.3 GHz with a minimum insertion loss of 0.7 dB.

The ICFAI Foundation for Higher Education Innovation & Entrepreneurship Council (IIEC) and Wadhwani Foundation jointly announced the launch of "NEN-IGNITE" - a pre-incubation program that is aimed at supporting start-up founders. through a structured pathway from Idea Discovery to Pitch Deck.

The 14 week IGNITE program will offer 360° support to startups which includes:

- Dedicated mentorship
- One-on-one with program managers
- Digital content
- Live online workshops
- Weekly assignments and milestone evaluations

NEN-Ignite aims to empower professionals, and post-college, college, and pre-college innovators with the knowledge to transform ideas into real ventures. Through the innovatively designed program, budding entrepreneurs are provided with experiential, structured, and immersive skills to become successful entrepreneurs. Notable benefits of the program include access to online resources, case study-based concept sessions, and interactive online sessions.

Department of Computer Science and Engineering conducted departmental faculty seminars.

Title: Comparative Analysis of Machine Learning Models for Customer Segmentation

Speaker: Dr. Rashmi Sahay, Assistant Professor, Dept. of CSE and Mr. Parmeshwar Joga

Date: 8th December 2022

Abstract: In the present competitive era, entrepreneurs struggle to increase and retain their customer base. Behavioural-based customer segmentation assists in the identification of potential customers, their buying habits, and shared interests. This helps to build an

efficient strategy to increase customer base and product sales. In this paper, we compare the efficacy of four machine learning algorithms, namely, KMeans, DBSCAN, Agglomerative Clustering, PCA with KMeans, in performing behavioural- based customer segmentation. The machine learning algorithms divide customers into an optimal number of customer segments based on parameter, namely, annual income, age, and spending score. The knowledge of customer segments based on the selected par meters will assist in exploring novel ways to increase marketing persona. Using the four algorithm, we group customers with common interests by extracting and analysing patterns in the available customer data. Our comparison shows that Agglomerative Clustering has the highest silhouette score of 0.6865 in performing behavioural-based customer segmentation in comparison to. The comparative analysis on feature based customer segmentation explored in this paper can be used by organization for exploring efficient mechanisms for customer segmentation.

Title: Hyperspectral Image Classification

Speaker: Dr. B. Seetharamulu, Assistant Professor, Department of CSE

Date: 23rd December 2022

Abstract: Hyperspectral image classification (HSIC) on remote sensing imaging has brought immersive achievement using artificial intelligence technology. In Deep Learning Convolution neural networks (CNN),2D-CNN, and 3D-CNN methods are widely used to classify the spectral-spatial bands of hyperspectral images (HSI). The proposed Hybrid 3D-CNN (H3D-CNN) model framework for deeper features extraction predicts classification accuracy in supervised learning. The model reduces the narrow gap between supervised and unsupervised learning and the complexity and cost of the previous models. The HSI classification analysis is carried out on real-world data sets of Indian pines Salinas datasets captured by Airborne visible, infrared imaging spectrometer(AVIRIS) sensors that performed superior classification accuracy results.

Department of Mathematics conducted a departmental faculty seminar.

Title: Double diffusive analysis on Maxwell fluid flow through a horizontal porous layer with effect of Soret and heat source

Speaker: Dr. Anjanna Matta, Assistant Professor, Department of Mathematics

Date: 29/12/2022

Abstract: A numerical study has been evaluated for the effect of Soret driven on a Maxwell fluid flow. The linear stability analysis of Maxwell fluid flow in a horizontal porous layer heated and salted from below is performed. By solving the eigenvalue problems, the critical Rayleigh number, wave number and different flow properties over stability are determined. For a better understanding the combined influence of Soret effect and heat source is investigated by using linear stability analysis. This thermal and solutal gradients are evaluated by applying shooting and Runga-Kutta method. The nature of study state velocity, temperature and concentration profiles are also studied with effect of Soret and heat source.

Promoting IcfaiTech

Dr. Soumit Samadder Chaudhury, Assistant Professor, ECE promoted IcfaiTech in Education Fair.

Event; Shiksha Mahotsav Agra
Location: Hotel Holiday Inn, Agra
Date: 10 th -11 th December 2022
Candidates on 10th: 350
Candidates on 11th: 365

Dr. Sirisha Potluri, Assistant Professor, Department of CSE promoted IcfaiTech in Education Fair.

Event: Ferozepur global career fair 2022, Punjab
Organized by: BCM group of schools
Date: 10 th -11 th December 2022

Dr. Sirisha Potluri delivered seminar on Artificial Intelligence and Machine Learning to +12 students in Ferozepur and Ludhiana

Dr. Ch.Leela, Assistant Professor and Head Of the Department, Physical Sciences enlightened +2 level school students on advanced new age career options offered by IFHE at an educational fest.

Event Title: Career and Scholarship Fest 2022

Organizer: In association with iEducationalize at Bangalore.

Venue: Hosur Public School, Hosur, Bangalore

Participation type: Presentation on “New age careers”

Co-participants: ABBS-Bangalore, Vidyashilp-Bangalore, VIT, Universal group of Institutions, Vijaybhoomi, Alliance University, RV University, Krea University and Dayananda Sagar University.

Number of students attended:

19th Dec: 150

Venue: Gyana Jyothi Public School, HAL, Bangalore

Participation type: Presentation on “New age careers”

Co-participants: ABBS-Bangalore, Vidyashilp-Bangalore, VIT, Universal group of Institutions, Vijaybhoomi, Alliance University, RV University, Krea University and Dayananda Sagar University.

Number of students attended:

20 December 2022: 200

Overview: During the campaign, the faculty gave a presentation on “New age careers” for 12th standard students and promoted IFHE-Hyderabad (IcfaiTech), ICFAI Business School, ICFAI Law school and ICFAI School of architecture. Students studying in Hosur Public School, Hosur and Gyana Jyothi Public School, HAL Bangalore attended the presentation. After the presentation, students visited the stalls for counselling and guidance. Aspirants were provided with brochures and a demo of IcfaiTech/IBS based on their interests and concern for undergraduate education in Science and Engineering streams. The virtual campus tour is provided through oral presentation, video presentation and photographs.

Welcoming Faculty

Dr. Mallavarapu Sandhya, Assistant Professor, Dept. of ECE

Education:

B.Tech
in Electronics & Communications Engineering
Vignan's Engineering College, Vadlamudi, Guntur
2010

M.Tech
in Communications Engineering & Signal Processing
R.V.R &J.C College of
Engineering, Chowdavaram, Guntur
2013

Doctoral Degree
National
Institute of Technology Warangal

Experience:

Assistant Professor
SMITW, Guntur
June 2010 to November 2011

Assistant Professor
Chalapathi
Institute of Technology, Guntur
July 2013 to April 2017

Adhoc faculty
Chalapathi
Institute of Technology Warangal
December 2017 to May 2018

Research:

Area of Interest
Flexible, wearable multi-band antennas, the conformal and radiation safe wearable antennas for WBAN applications, Electromagnetic bandgap
structures and defected ground structures loaded monopole antennas

Publications
more
than 6 papers in reputed journals and presented several papers in international conferences

Membership
IEEE and MTTS

Dr. A. Sankar Ponnapalli , Assistant Professor, Dept. of ECE

Education:

B.Tech
in Electronics & Communications Engineering
JNT University Kakinada
2011

M.Tech
in RF & Microwave Engineering
GITAM (Deemed to be University) Visakhapatnam
2013

Doctoral Degree
GITAM (Deemed to be University) Visakhapatnam
2018

Diploma
in education technology and management
University of Hyderabad
2021

Research:

Area of Interest
microwaves, antennas, intelligent transportation systems, and engineering education technology etc.

Publications
authored or co-authored books, book chapters, and more than 60 research articles

Membership
reviewer and editorial board member for various international journals and conferences

Dr. Upendar Mendu, Assistant Professor, Dept. of Mathematics

Education:

B.Sc.
Kakatiya University, Warangal
1996

M.Sc.
in Applied Mathematics
National Institute of Technology, Warangal
1998

Doctoral Degree
in Mathematics
National Institute of Technology, Warangal
2014

Experience:

Lecturer
Thushara Post Graduate School of
Information Science & Technology (KU), Warangal
1998-2001

Assistant Professor
S.R.R. Engineering College, Khammam
2001-2006

Associate Professor
TBomma
Institute of Technology and Science, Khammam
2006-2010

Assistant Professor
GITAM University, Hyderabad Campus
2013-2023

Research:

Area of Interest
Data Science - Machine learning - Deep Learning - Fluid Mechanics - Micropolar and couple stress fluids -Convective heat and mass transfer - porous media - CFD, Nanofluids, Stability Analysis

Website:

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

Facebook:

https://www.facebook.com/IcfaiTech/

LinkedIn:

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

admissions.icfaitech@ifheindia.org

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

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

Editorial Team:

Dr. K. L. Narayana, Director, IcfaiTech
Dr. Rashmi Sahay, Asst. Prof.-CSE, IcfaiTech
Ms. Manoswita Dasgupta, Content Writer, IcfaiTech