SCHOOL OF COMPUTER SCIENCE ENGINEERING AND INFORMATION SYSTEMS

SCORE-LINES

THE OFFICIAL TECHNO E-NEWSLETTER OF SCORE

APRIL TO JUNE 2024

VIT - A PLACE TO LEARN; A CHANCE TO GROW

SCORE-LINES

CONTENTS OVERVIEW

From Dean's Desk

Greetings!!!!

I extend my warm greetings to yet another issue of the official "SCORELINES" Newsletter of SCORE for the period between April and June 2024. Our school being dedicated to offer top-notch computer science engineering and related education programs prepares the students to be industry-ready and mentors them to reach their full potential in resolving real-time problems and perform cutting-edge research.

Diversity, multidisciplinary collaboration, entrepreneurial thinking, and ingenuity are highly valued among our dedicated students, Research Scholars and faculty members. In this edition, such practical and pragmatic demonstration is reflected through the various events and activities conducted in the form of guest lectures, thon – events, value-added courses, workshops and seminars.

This issue also features the various publications, consultancy projects, and invited presentations that our faculty members have rendered, all of which demonstrate their profound involvement towards academia and research.

This issue also emphasizes the accomplishment of obtaining 59.7 lakhs as international research funding from UKIERI-SPARC, as well as the patents that our faculty members have been granted for their consistent commitment towards research.

It is our fervent intention that this newsletter will facilitate the sharing of professional and knowledge-based information, serving as an authentic showcase of the various events and achievements of our students, research scholars and faculty members.

Wish you all a very Happy Reading!!

Dr. Sumathy S
Professor & Dean
School of Computer Science Engineering & Information Systems
Vellore Institute of Technology, Vellore
Email: dean.score@vit.ac.in

EVENTS

THON – EVENTS

Event Name	Title of The Programme
Tech-a-Thon	Transforming problems into Tech Marvels
Code-A-Thon	Application Development using Object Oriented Concepts
Code-A-Thon	Data Structures and Algorithms (Begin your code)
Code-A-Thon	Data Structures and Algorithms (Begin your code)
Code-A-Thon	Cutting Edge Biometric Solutions for addredssing real-world authentication challenges
Hackathon	Developing AI-Enabled Applications to mitigate Cyber Attacks
Web-A-Thon	Modern Web App Development using Full Stack Tools
Web-A-Thon	Innovative Enterprise Application Development Using Full Stack Web Technologies
Web-A-Thon	Enterprise Web Application Development Using Full Stack Tools

VALUE – ADDED COURSES

Title Of The Programme	Organized By
IoT and Connected Devices	Dr. Shantharajah S P, Dr. Swarna Priya R M
Image processing using Convolutional Neural Network	Dr. Hemalatha S, Dr. Neelu Khare
Robotic Process Automation(RPA)	Dr. Vanmathi C, Dr.Mangayarkarasi R

I hear and I forget, I see and I remember, I do and I understand – Confucius
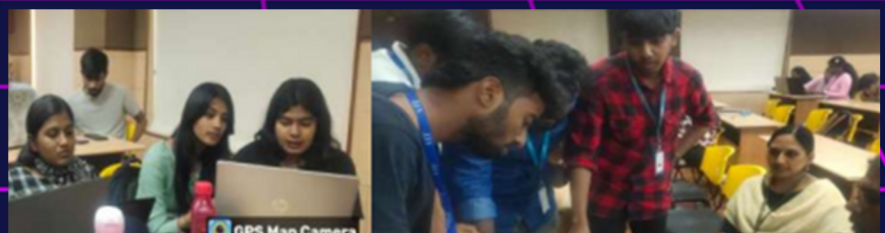
PROJECT EXHIBITION

17.04.2024

24.04.2024

Guest Lectures

S.No	Title Of The Programme	Resource Person
1	Machine Learning – An Industry Perspective	Ms.Arthi Udayakumar, Accenture R&D, Bengaluru
2	Essentials and Applications in Blockchain	Mr.Vijay Srinivasan, Zensar Technologies, Chennai
3	Recent Trends in AI and ML based IoT analytics and applications in Industrial Perspective	Mrs.aarthi Udayakumar, Accenture Labs, Bangalore
4	Emerging Trends in Object Oriented Programming using C++	Mr.K.Jeevananth, Pebbles Electronics, Coimbatore
5	IoT Revolution: A Sneak Peak	Mr.Gopinath P S, Base Automation Technologies Pvt Ltd
6	Vision Control (Gitlab); An Industry Perspective	Mr. Vigneshwaran Somasundaram, TCS, Chennai
7	An Industry Perceptive : Data Preprocessing Techniques towards Efficient and Reliable Knowledge Discovery	Mr.Velmurugan J, Tech Mahindra, Bangalore
8	Intellectual Capital Management : Oppurtunities and Challenges	Dr. Y U S Lakshmi, Centre for Development of Telematics (C-DOT), Bangalore
9	Unravelling the Fourth Industrial Revolution : Insight for IT Professionals	Mr.Murali Sundaram, Supporting Corporations (TAFE, Redington) Universities (SRM, IIT, DoMS and RIT) and Startup Eco Systems (TBI's) on Gen AI Capabilities
10	Various Techniques of Testing–Approaches from the industry perspective	Mr.Rajadurai Krishnamoorthy, Sabre Corporation, Bangalore
11	Creating Secure and Fast Back–end in Python using FastAPI	Mr.Rahul Sharma, Meta (formerly Facebook) London
12	Computing Architecture Design approach for different Optimization Target	Mr.Muthu Kumar S, Cadence Design Systems, Bangalore
13	OOP Concepts and Design Patterns in C++	Mr. Rahul Sharma, Meta (formerly Facebook) London
14	Drone Imaging for Agriculture Applications	Dr.Sathish Kumar S, Geosystems, Research Institute, Mississippi State University, USA
15	4IR–Driven IoT Research for You, Us and All	Dr.A.B.M. Afim Al Islam, Department of CSE, Bangladesh University of Engineering and Technology, Bangladesh
16	Exhibiting the working models on Network Security Systems	Dr. Priya U
17	Intelligence in Internet of Things	Prof.Atanu Roy Chowdhury, Capsule Lab, Kolkatta
18	From idea to impact	Dr.Kavitha B R, Dr. Usha Preethi P

You don't understand anything until you learn it more than one way – Marvin Minsky

Guest Lectures

S.No	Title Of The Programme	Resource Person
19	Exhibiting the working models on Network Security Systems	Dr. Mohana Priya P, Dr. Arun Kumar A
20	Exhibiting the working models on Network Security Systems	Dr. Charanya R, Dr. Ramya G
21	Exhibiting the working models on Network Security Systems	Dr. Priya U
22	Challenges and Solutions in Requirements Engineering	Mr. Vijayavel Rathnavel, PMP LTI Mindtree Ltd, Chennai
23	Power of Data Analytics	Mr. Gowri Shankar J, Deloitte India, Chennai
24	SAP ERP Overview	Mr. Ganesh R K, Accenture, Chennai
25	Projects for SIGHT, from SCORE	Dr. Iyapparaja M, Dr. Jothish Kumar M
26	Projects for SIGHT, from SCORE	Dr. Balaji E, Dr. Vinoth Kumar E
27	Exploring Distributed Databases: Architectures, Challenges and Applications	Mr.Ravikumar S, Aspire Systems
28	Advancements and Prospective Directions in Data Mining Applications	Mr. Vikramrajkumar Thiyagarajan, Medicine Industries, Alpharetta, Georgia, USA
29	Object–Oriented Programming: Foundations and Applications in IT	Mr. Venkatraman K Hexaware Technologies, Chennai
30	Decoding devOps with hands on deployment guide	Mr. Partha Roy, Fasal Wolkus Technology Solutions Private Limited, Bangalore
31	Transforming problems into Tech Marvels	Dr. Hemalatha S
32	Realtime Industry Exposure on Operating Systems	Mr. Mohammed Farooq Abdulla, Inborn Technologies, Chennai
33	Industry Applications on Operating Systems	Mr. Mohammed Farooq Abdulla, Inborn Technologies, Chennai
34	Optimizing Algorithm Efficiency through Advanced Data Structures	Vidhya Lakshmi S, HCL Technologies Pvt Ltd, Madurai
35	Object–Oriented Programming: Principles and Practices in Real-world scenarios	Mr. Venkatraman K, Hexaware Technologies, Chennai

All roads that leads to success have to pass through hard work boulevard at some point
- Eric Thomas

Guest Lectures

S.No	Title Of The Programme	Resource Person
36	Generative AI Models	Dr. Gang Li, School of Information Technology, Deakin University, Australia
37	Need of Programming Languages for Application Development	Mrs. Meera R, HCL Technologies, Chennai
38	Impact of OOAD on Industry Innovation	Mr. Vijay Mahantesh, CadMaxx Solutions, Pvt Ltd, Bangalore
39	Machine Learning in Engineering Applications	Dr. Ravi Samikannu, Bostwana International University of Science & Technology, Dept. of Electrical Computer and Telecommunication Engineering, Palapye, Botswana
40	Impact of Soft Computing Techniques for Real World Problems	Mr. Deepan Raj, HCL, Chennai
41	Algorithm Design Techniques	Mr.N. Sathiyamoorthy, CISCO Systems, Bangalore
42	Biometric Security System	Mr. Paulraj Damodaran, CGI Management Consulting Pvt. Limited, Chennai
43	Today's Biometric Systems: An Industry Perspective	Mr. Deepan Raj, HCL, Chennai
44	Agile Development Process–An Industry Perspective	Mr. Dharsheni Sriram, Accenture, UK.
45	Implementing Business Intelligence Visualization using PowerBI	Mr.Kiran Radhakrishna, Senior Principal Consultant, Infosys
46	Existing Challenges in current network security world (Are you a Sniper or victim in facing the challenges)	Dr. Murugappan Valliappan, Virtusa, Chennai
47	Software Architecture and Design–An Industry Perspective	Mr. Sunil Subrahmanyam Yadavalli (Alumnus, M.Teh–SE, 2009–2013),IDS INC, Bangalore
48	Impact of Digital Marketing in E–Governance	Mr. Jowin Leo Y, Digitalmesh Softech Pvt. Ltd, Chennai
49	Industry 5.0 : The power of AI, Big Data and Cloud Computing	Mr. Srikanth Subramanian, Flex,Twilio, Bengaluru
50	Industrial Applications of Digital Electronics	Mr, Lokeshwaran Kittappan, NXP Semiconductors, Bengaluru, Karnataka

Guest Lectures

S.No	Title Of The Programme	Resource Person
51	Impact of Cybersecurity in Mobile App Development	Mr. D. Premnath, L&T Technology Services, Coimbatore
52	Unveiling the power of object-oriented programming (OOP)-An Industry Perspective	Mr. Pradeepkumar Murugesan, Comcast India Engineering Center, Chennai
53	Aruba Network Migration: Industry Practice	Mr. Jaganraj J, Hewlett Packard Enterprise Global Software Pvt. Ltd
54	Legal Perspective of Cyber Crimes and Cyber Security	Mr. Ashok Kumar Mohan, Founder & Director, Kriyavan Cyber Forensic Service
55	Exhibiting the working models on Digital Logic and Microprocesor	Dr. M. Pradeepa
56	Relational Databases in Cloud	Mr. Anand Ragothaman, [BE CSE 2003 batch], Synamedia, Singapore
57	Single Cycle Micro Architecture Design using NEORV32	Mr. Bharathiraja Nallathambi, Linumiz, Coimbatore
58	Dots between Logic and Architecture in RISC V	Mr. Bharathiraja Nallathambi, Linumiz, Coimbatore
59	Web Mining for Effective Fraud Detection	Ms. Lydia Sherly, Mizuho Global Services, Chennai
60	Artificial Intelligence in E-Governance and India-AI Initiative	Dr. Nivash Jeevanandam, INDIAai-The National AI Portal of India
61	Beyond the Click: Exposing the Dark Side of Web Design	Ms. Lavanya P, Scientist D, RISE Group, CDAC, Bengaluru
62	An Insight on Linux Kernel	Pallavi Paramita Nayak, Robert Bosch, Bangalore
63	Data Structures and its Special Focus on industry	Mr. Soham Sen, Senior Project Manager, Stellar Innovations Pvt. Ltd, Bangalore
64	Mastering Data: Exploring E-Database Management System	Mr. Raghavendran S, Senior Application Developer, Optimum Solutions, Singapore

In the middle of difficulty lies opportunity.– Albert Einstein

Dr. Gang Li, Professor, School of Information Technology, Deakin University, Australia delivered a session on April 22, 2024.

Visit of Delegates from George Mason University, USA – Dr. Kamaljeet Sanghera, Executive Director, Institute for Digital Innovation and Professor in Information Sciences and Technology , Dr. Chrishon Blackwell, Mason's Senior International Officer visited on May 8th 2024.

Visit of Delegates from Lehigh University PA, USA – Dr. Cheryl Matherly, Vice President/Vice Provost, International Affairs, Dr Anand Ramamurthi, P.C. Rossin Professor and Chair of the Department of Bioengineering at Lehigh University, Dr Vinita Desai, Senior Advisor Recruiting Strategy & partnerships on June 17th 2024

Do not go where the path may lead, go instead where there is no path and leave a trail.
– Ralph Waldo Emerson

Faculty Achievements (Project Grants)

S.No	Faculty Name	Project Title	Funding Agency & Amount
1	Prof. Siva Rama Krishnan S Prof. Sweta Bhattacharya Prof. Senthil Kumar M Prof. Chiranji Lal Chowdhary	Environmental Monitoring and Evaluation via Remote Advanced LoRa-Driven Detectors (EMERALD) for Heavy Metal Contamination	SPARC-UKIERI 59.7 lakhs

Faculty Achievements (Patents)

S.No	Faculty Name	Patent Titled	Status
1	Prof.Lawanya Shri M Prof.K. Sujigarasharma Prof.S. Varun Prof.M. Karthikeyan	System and Method for Determining a Depression State of a User	Published
2	Prof.Anitha A	Smart Glasses	Granted

Ambition is the path to success. Persistence is the vehicle you arrive in.– Bill Bradley

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Faculty Achievements (Consultancy Projects)

S.No	Faculty Name	Project Title	Funding Agency & Amount
1	Prof. Sumangali K Prof. Prasanna S	Clictoprint data driven fleet optimization	CLICTOPRINT ₹ 1,50,000
2	Prof. Gitanjali J Prof. Karthikeyan J	Cyber-crime detection and analysis schemes for evidence collection	Spider software solutions, ₹ 1,50,000
3	Prof. Srinivasan P	Custom ERP Software for small Businesses	DATUMALYS PRIVATE Ltd ₹ 1,20,000
4	Prof. Shantharajah S P Prof. Swarnapriya R.M	Target Identification and virtual screening in platform-based drug design	Rhogenites Biotech India Ltd ₹ 53,100
5	Prof. Priya M	Automatic coffee bean defect detection and grading	Wootz Metal Solutions India Ltd ₹ 1,00,000
6	Prof. Selvarani B	AI/ML: Spoof detection: Real vs recorded vs generated audio detection	SAMSUNG PRISM ₹ 86,400
7	Prof. Kumar P J Prof.Mangayarkarasi	Web based customer management application	FASHION HOUSE ₹ 1,18,000
8	Prof. Subhashini R	Fleet Driver Support Systems using AI technologies	Sri Jayaram Motors, ₹ 4,00,000
9	Prof. Balasubramani M	A smart heart rate estimation device using radar signal	Biofly Instruments Pvt Ltd ₹ 1,00,000
10	Prof. Vijay Anand R Prof. Alagiri I Prof. Magesh G Prof. Jayalakshmi P Prof. Arivuselvan K Prof. Muthamil Selvan T	Exploring the world through augumented Reality	Funtime Leisure Pvt Ltd ₹ 2,00,000

Education is not preparation for life; education is life itself." – John Dewey

Certification Received by Faculty

Name of Faculty	Certification Details	Certifying Institute/Organization
Prof. Priya V	Cybersecurity Essentials	Cisco
Prof. Sujatha R	Java Certified Foundations Associate	ORACLE
Prof. Sivashankari R	Java Certified Foundations Associate	ORACLE
Prof. Arunpandian J	Java Certified Foundations Associate	ORACLE
Prof. Lavanya Shri M	Java Certified Foundations Associate	ORACLE
Prof. Nancy Victor	Java Certified Foundations Associate	ORACLE
Prof. Thilagavathi M	Java Certified Foundations Associate	ORACLE
Prof. Vellingiri J	Java Certified Foundations Associate	ORACLE
Prof. Venketesh P	Java Certified Foundations Associate	ORACLE

Certification Received by Faculty

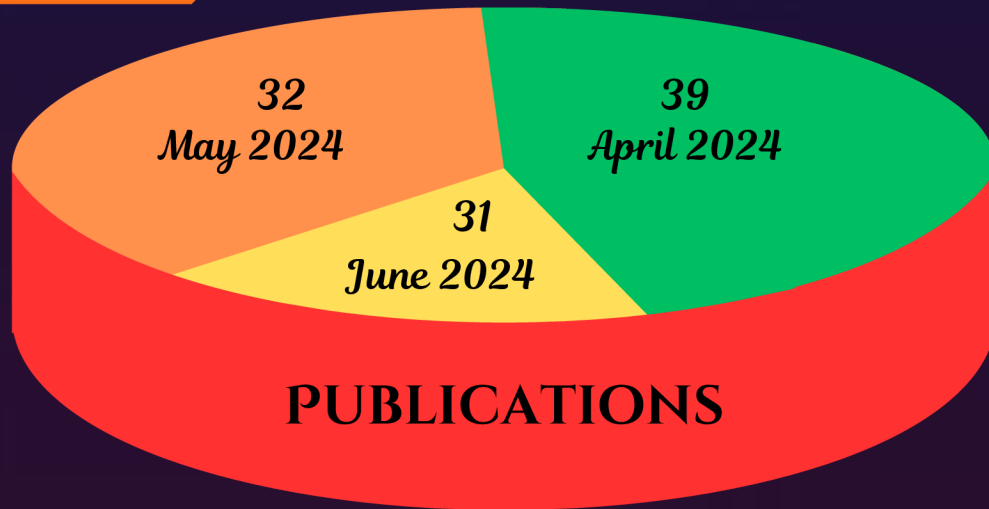| Name of Faculty	Certification Details	Certifying Institute/Organization
Prof. Vivekananda GN	Java Certified Foundations Associate	ORACLE
Prof. Bala Ganesh N	Java Certified Foundations Associate	ORACLE
Prof. Thangamariappan J	Java Certified Foundations Associate	ORACLE
Prof. Kuruva Lakshmanna	Java Certified Foundations Associate	ORACLE
Prof. Vijayarani A	Java Certified Foundations Associate	ORACLE
Prof. Bhuvaneswari M S	Java Certified Foundations Associate	ORACLE
Prof. Mareeswari U	Java Certified Foundations Associate	ORACLE
Prof. Senthil Murugan B	Java Certified Foundations Associate	ORACLE
Prof. Mangayarkarasi R	Automation Anywhere Certificate for Automation Anywhere Certified Essentials RPA Professional (Automation 360)	Automation Anywhere University (AAU)

Faculty as Resource Person

S.No	Faculty Name	Topic of Lecture	Delivered @
1	Prof. Senthil Murugan B	Modern Web Development	Kalasalingam University, Virudhunagar
2	Prof.Agilandeeswari L	Deep Learning and Transformer based Land Use/Land Cover Classification using Hyperspectral Images	Arasu Engineering College, Kumbakonam
3	Prof. Jerat Julus	Chatbot using AI	Saveetha Engineering College, Chennai

Faculty Achievements (Honors & Awards)

Prof. Vivekananda G N received Young Researcher Award from Computer Society of India on 29.06.2024

Leadership and learning are indispensable to each other – John F. Kennedy

PUBLICATIONS

- 32 May 2024
- 39 April 2024
- 31 June 2024

Ph.D Oral Examination Completed

S.No	Register Number	Scholar Name	Guide	Title of the Thesis
1	19PHD0505	Jothiaruna N	Dr. Anny Leema A	Augmentation and segmentation of 12-lead ecg images for classification and detection of cardiac disorders using deep learning techniques
2	19PHD0024	Rajiv S	Dr. Navaneethan C	Semantic similarity enhanced focused web crawler for efficient crawling of web pages
3	20PHD0103	Jyothi p	Dr. Srinivas Koppu	Breast Cancer Classification using Hybrid Deep Learning Models for Hispothological Images
4	10PHD0386	Kavitha G	Dr. Elango M N, Guide, VIT Chennai campus, Dr. Vellingiri J, Admin guide	An approach to Feature selection in large scale data using machine learning

Mr. Shiv Pratap Bhadauria,
MCA (2013 Batch)
Present Position: Senior Consultant, Deloitte

As an MCA student at VIT University, I had the chance to become very involved in the theoretical and practical facets of my field of study. I refined my talents by completing numerous projects in a variety of fields, such as "Image Processing Techniques for Medical Imaging & Satellite Image Processing" and by presenting papers at conferences on science, engineering, and technology. It inspired me to conduct study with the goal of coming up with original answers to challenges that face the actual world. My participation in departmental clubs and seminars improved my ability to communicate with others and gave me the opportunity to work with peers on creative ideas in a variety of fields. This experience strengthened my knowledge base and equipped me to handle complicated problems in the future.

I would like to appreciate the sincere and dedicated effort by the faculty members and the management of VIT, Vellore for shaping my future and helping me achieve my dreams.

Ms. Banu Priya Subramani,
MS (Software Engineering) (2009 Batch)
Present Position: Business & Integration Arch Asst Manager, Accenture, Bangalore

During my college days at VIT, the Institute played a crucial role in broadening my horizons by offering me the opportunity to complete my final year project at the University of Malaya. This experience was invaluable in helping me understand the importance of inclusion and diversity on an international level. Post my graduation form VIT, I have continued to stay connected with my alma matter through the VIT alumni network, where I share my industry experiences through guest lectures and participation in various technical events. I also conduct sessions for the faculty, focusing on 'Train the Trainers' programs, particularly on emerging topics like Gen AI. VIT has truly been instrumental in shaping my career and continuing my engagement with the academic community.

Live as if you were to die tomorrow. Learn as if you were to live forever– Mahatma Gandhi

Tech Stuffs

Reasons why the @ was included in the email addresses
The first one, which was a rarely used icon. The second one, which in Latin means "in", gives meaning to the addresses
(for example, user (in) google.com).

DID U KNOW?

- When compared to a Qwerty keyboard, a Dvorak keyboard enables you to type 20 times quicker.

- Only two of the top 500 supercomputers are Windows-based, whereas 485 use Linux.

- You may heat a room with Gaming PCs more effectively than a heater.

- Hard drives are very sensitive to vibration, and even yelling at them or tapping the device causes them to slow down.

- The overall global storage is projected to reach 175 zettabytes by the end of 2025.

- Per year, Google receives 1.2 trillion search requests, which translates to about 40,000 every second and 3.5 billion each day.

- MyDoom is the Most Expensive Computer Virus in History(The virus cost an estimated $38.5 billion in damage and came about in January of 2006. Shortly after that, it earned a name for itself as the fastest-spreading virus ever).

Knowledge has to be improved, challenged, and increased constantly, or it vanishes.
— Peter Drucker

Advisory Team

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Associate Dean – Dr. Dhinesh Babu L D
HoD Computer Applications – Dr. Vijayan E
HoD Information Technology – Dr. Prabhavathy P
HoD Smart Computing – Dr. Iyapparaja M
HoD Software and Systems Engineering – Dr. Neelu Khare

Editorial Team

PROF. SWETA BHATTACHARYA

PROF. SENTHIL KUMAR T

PROF. MOHANAPRIYA P

PROF. THANGA MARIAPPAN L

PROF. ARUNKUMAR A

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Thank you