



Department of Computer Science and Engineering
School of Computing

April - June 2024 Volume 9 | Issue 2

VISION

To produce intellectual graduates who could contribute significantly in the analysis, design, development, operation and maintenance of complex software systems for meeting the ever changing requirements of service systems and to compete globally towards professional excellence.

MISSION

- M1: Design curricula for imparting training in adapting newer computing methods and technologies for providing effective and efficient solutions to the existing / new problems.
- M2: Emphasizing in-depth knowledge of the subjects by employing Information and Communication Technology (ICT) based pedagogy methods
- M3: Creating a conducive research environment for making technological innovations by the faculty and students.
- M4: Providing leadership skills and professional ethics thereby making a prolific career in academics and industry.

PROGRAM EDUCATIONAL OBJECTIVES

- PEO1 Will formulate, solve and analyze Computer Science and Engineering problems using necessary mathematical, Scientific and engineering fundamentals.
- PEO2 Will demonstrate the impact of cutting-edge technologies to accomplish social and professional responsibilities.
- PEO3 Will demonstrate critical thinking, communication, teamwork, leadership skills and ethical behavior necessary to function productively and professionally.
- PEO4 Will pursue higher education at reputed institution in India and abroad, work in product development companies and engage in lifelong learning.



NEWS LETTER

01 | Technical Events

02 | Students Acheivements

03 | Placement Record

04 | Research / Patent / Book & Book Chapter Publications The Department of Computer Science & Engineering (CSE) was established in the year 1997. The department has grown to current strength of 3051 students from a humble beginning with 250 students. The department is equipped with the latest state-of the art laboratories. The department has a dedicated team of faculty members Professors, 44 Associate with **Professors** and 152 Assistant Professors among them 83 are having doctoral degree. Our students are having the membership in professional societies like CSI, IEEE-CS, IEEE-PCS, IEEE-WIE, ACM & ISTE. Our students have been placed with leading MNC's like Amazon, Cisco, Accenture, Capgemini, Virtusa, Wipro, ZOHO, KAAR technologies, TCS, Microsoft, Infosys, Cognizant, HP and Verizon.

For further details:

www.veltech.edu.in/cse.

Institution Headships



Col. Prof. Vel. Dr. R. Rangarajan B.E. (Elec), B.E. (Mech), M.S. (Auto), D.Sc., Founder President & Chancellor



Dr. Sagunthala Rangarajan M.B.B.S Foundress President



Mrs. Rangarajan Mahalakshmi Kishore B.Tech, M.Tech, MBA(UK), Chairperson & Managing Trustee



Prof. S. Salivahanan B.E, M.E, Ph.D Founder President & Chancellor



Prof. Dr. S P. Chokkalingam M.Tech, Ph.D Dean - School of Computing

Technical Events

Projectify ML: A Project-Based Learning Hackathon Contest - 2024

12th April 2024





This event offers students a hands-on learning experiences and provide a platform to showcase their technical expertise and presentation skills. The hackathon commenced at 10:00 AM with a Holy Prayer song. The event coordinator, Dr. S. Alex David welcomed everyone, followed by an inspiring inaugural address from Dean SOC, Dr. V. Srinivasa Rao. Both highlighted the importance of practical machine learning experience and participants to innovate and excel. The event warmly ended up with Valedictory Function speech given by Dr.Muralidhar – Professor and Head CSE. which was very encourageable one for the student regarding their skill development. Then the participants have given their valuable feedbacks which was very much needed for an event conduction. Followed by the participants feedback, the prize announcements were done. Finally vote of thanks given by event coordinator.

STUDENT SPECIAL ACHIEVEMENTS COGNIZANCE - IDEAZ 2024



Cognizance is the annual technical festival organized by the Indian Institute of Technology (IIT) Roorkee in Uttarakhand, India. It is a platform that promotes creativity, innovation, and the development of technical skills among students.

The 2024 edition of Cognizance featured various events, workshops, and competitions that aimed to provide participants with opportunities to showcase their ideas and talents.

We are thrilled to share that our college students have actively participated in various technical competitions and have achieved remarkable success, winning several prizes, thanks to the support of our dedicated faculty members.

STUDENT SPECIAL ACHIEVEMENTS

COGNIZANCE - IDEAZ 2024



- 1. UTTKARSH KUMAR (VTU20041)
- 4. ASHIQUE ALI (VTU20055)
- 2. YASHRAJ ANAND (VTU20763)
- 5. SAURAV KUMAR (VTU1909)
- 3. SUSHANT KUMAR (VTU20074)
- 6. ABHINAV ANAND (VTU20015)

2ndPRIZE RS.30, 000/-

Title: RESILIENT MINDS

Domain: WEB DEVELOPMENT AND ARTIFICIAL INTELLIGENCE

IIT ROORKEE, UTTARAKHAND 17TH MARCH, 2024

MENTOR: Dr. S. RAVIKUMAR, ASSOCIATE PROFESSOR/CSE

COGNIZANCE - IDEAZ 2024



- 1. YASH RAJ VTU23168
- 2. YESHWANTH GUPTA- VTU20497
- 3. VANKADARI CHAKRADHAR -VTU22842

2ndPRIZE RS.30, 000/-

Title: THE RISE OF AI-RESHAPING JOBS AND GROWTH IN DEVELOPING COUNTRIES

Domain: ARTIFICIAL INTELLIGENCE IIT ROORKEE, UTTARAKHAND 17TH MARCH, 2024

MENTOR: Mrs. SHYAMALA KUMARI, ASSISTANT PROFESSOR / CSE

STUDENT SPECIAL ACHIEVEMENTS

COGNIZANCE - PROD-G



- 1. MOUMONI ROY(VTU 22702)
- 2. VAISHNAV V H (VTU 20096)

2nd PRIZE RS.30, 000/-

Title : A SUSTAINABLE WASTE TECH Domain : DEEP LEARNING AND CV
IIT ROORKEE, UTTARAKHAND
16TH MARCH, 2024

MENTOR: Dr. D. UMANANDHINI, PROFESSOR / CSE

COGNIZANCE - IDEAZ 2024



- 1.MOUMONI ROY- VTU22702
- 2. VAISHNAV V H (VTU 20096)
- 3. J S N AKHIL (VTU19714)

1stPRIZE RS.20, 000/-

Title: A SUSTAINABLE WASTE TECH
Domain: DEEP LEARNING AND CV
IIT ROORKEE, UTTARAKHAND
17TH MARCH, 2024

MENTOR: Dr. D. UMANANDHINI, PROFESSOR / CSE

STUDENT SPECIAL ACHIEVEMENTS

COGNIZANCE - TECHZIBITION 2024



- 1. JAY BARDHAN SINGH (19691)
- 2. G SRUTHI (19610)
- 3. SHANU KUMAR (19462)
- 4. CH V SRIRAM (19643)
- **5. RAJNISH KUMAR(19607)**

3rd PRIZE RS.40, 000/-

Title::PARK SMART - IOT BASED CAR PARKING APPLICATION

Domain: IOT AND WEB APPLICATION IIT ROORKEE, UTTARAKHAND 17TH MARCH, 2024

MENTOR:Dr. DHILIP KUMAR V, PROFESSOR/CSE

S. No	Company Count		СТС
1	[24]7.ai		2.5
2	Accenture	10	4.5
3	ADP (internship)	1	25k / M
4	ADP India	4	8.8
5	Atos	30	3.1
6	BNP Paribas	BNP Paribas 11	
7	BNY Mellon 1		10.63
8	BYJU'S	3	7
9	CISCO	2	17.9
10	Comcast	10	7
11	Concentrix	10	2.5
12	Daimler India	1	7.5
13	DeltaX	1	
14	DevTown	DevTown 40	
15	EPIKInDiFi	2	4

S. No	Company Count		СТС
16	Foxconn	6	2.76
17	Genpact	33	8
18	Global Quest Technologies	13	2.5 - 10
19	HCL	24	4.25
20	IDP 1		8
21	Infosys 1		9.5
22	Kalvium 9		5
23	KGiS 2		2.83
24	Kodenest	Kodenest 22	
25	KPMG India	3	5
26	L&T Technology Services Limited (LTTS)	13	4
27	Logitech	2	1.68
28	Maveric Systems	3	3.5
29	Merit Data and Technology 3		5
30	Motherson Automotive Technologies & Engineering		3

S. No	Company Count		СТС
31	Mphasis 6		4
32	Mu Sigma	23	5
33	OpenText	2	10
34	PayTabs	2	3.5
35	RapidData Technologies	1	6
36	Renault Nissan 5		4.2
37	SkillForge 26		4.32
38	Societe Generale 1		5.43
39	TCS 30		3.3 - 7
40	Trane Technologies	4	6
41	TransCurators	1	1.8
42	Valeo India	1	4
43	Zoho Corp 1		8.4
44	Rapport IT 2		2.5
45	Qspiders	30	3.5 - 9.5

S. No	Company	Count	СТС
46	Tech Mahindra	3	3.25
47	Academor 13		4
48	Zoho	Zoho 1	
49	SmartED	SmartED 12	
50	Qbits	Qbits 1	
51	EdiGlobe	4	16k / M
52	Ascendion	Ascendion 2	
53	Capgemini	10	
54	Cognizant	5	4

SUMMER SEMESTER COURSE READY PROGRAMME 24th & 25th JUNE 2024

Department of Computer Science and Engineering has scheduled the Semester Ready Programme for each course handling faculty members to share their knowledge about the course content with their peers. In this programme, faculty members share their relevant course material, Lesson Plan, Question Paper, QP Keys, Question Banks prepared and got verified by the concerned CC. As this programme is scheduled before the commencement of the semester, the newly joined faculty members can easily understand the procedure without any inconvenience.

Vel Tech Rangarajan Dr. Sagnethala E&D Southists of Science and Technology School Of Computing Department of Computer Science and Engineering Academic Year 2004-2020 Summer Semester Course Ready Programme - Action Plan

Day	Session I Agenda	Session 1 Outcome	Session 2 Agenda	Session 1 Outstance	
	Academic Calendar	9 AM to 10:30 AM Submission of Course Coordinator Meeting 1 Document (Theory & Lab) 10:45 AM to 12:45 PM Submission of Lesson Plan Becorporated with Content Delivery Methods and Shadent Centric Method (Theory / Lab / Intergrated)	Unit 1 PPT and Student Study Material with Lab Task	L 65 FM to 3.30 FM All Unit PFT and Studiest Study Material with Lab Task 5.65 FM to 6.65 FM Case Studies Propert Based Leading	
	Course Content, Course Objectives & Course Outcomes		Unit 2 207 and Student Study Material with Lab Tesk		
	Mapping of CO's and PO's		Unit 3 PPT and Student Study Material with Lab Tank		
	Text Book and Reference Book		Unit 4 PPT and Student Study Statestal with Lab Task		
	Discussion on Previous Regulation / Deposites outcomes attainment		Uset 5 PPT and Disabent Disaby Material with Lab Tesk		
	Improvements suggested from previous regulation. / semester & Lesson Plan.		Beyond the syllabor and Care Studies / Use Cares		
	Course Considuator Meeting Minimes Discussion. (Theory and Lab)		Gate Question, related to Syllabox		
	Earliewing the content delivery methods for all units with ICT and ALM		Project based Learning		
	Question paper setting & Scheme of Evaluation	9 AM to 12 45 PM	Discussion of Nissans Sansoury E. Level		
	Assignment Questions preparation with CO's & K. Level mapping		Question Resid	I. 45 PM to 3.30 PM Submission of Mad Test Qi and Unit Test QF 3.45 PM to 4.45 PM	
	Discussion on Continuous Internal Assessment (CIA)		Stid Test I / Usat Test I Question Paper		
	Preparation plan for FCAR / CCAR		Mid Test 2/ Unit Test 2 Question Paper		
		Preparation of MCQ's, Question bank	Assignment AMS Updation	Unit Test & Model Lab Question Paper	Dubmission of End Semeste Sample Model QP's for
	Monitoring on Student Attendances Performance		End from Theory and Lab Question Paper Plan	Therety and Lab	



FACULTY ORIENTATION 2024

Department of HRDC is conducting the Faculty Induction Program for the newly joined faculty members every year. This year it was held between 10.06.2024 to 14.06.2024. This program helps the faculty to get the knowledge about the Academics, HR policy, Research Activities, Resources for the Research Support & International Relations and also the Placement Activities. Really this is the Brainstorming session for the newly joined faculty members. Around 70 faculties from SoC were actively participated in this orientation program.









We are excited to share that our faculty members have recently published their research articles in prestigious journals with high impact factors. This achievement highlights our department's strong success in the field of research.

2024 April - June

© Clarivate SCI: 20 Web of Science™

Scopus: 25

Scopus

International Conference: 50





A Deep Auto-Optimized
Collaborative Learning (DACL)
model for disease prognosis using
Al-IoMT systems





Dr. N. MalarvizhiProfessor

Department of Computer Science



MLBFN Optimized with Archimedes Optimization Algorithm for SRCE June 2024

Expert System with Applications - Q1



Dr. S. Sridevi
Professor
Department of Computer Science



Mr. M. Thiyagarajan

Assistant Professor

Department of Computer Science

Unified Framework for Neurological
Disease Detection and Gait
Classification Using Deep Graph
Learning

May 2024
International Journal of Intelligent
Engineering and Systems – Q2





Dr. R. Srinivasan

Developing a novel energy efficient routing protocol in WSN using adaptive remora optimization algorithm

June 2024

Expert System with Applications - Q1



Professor
Department of Computer Science



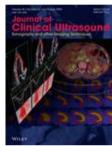
Dr. S. SaranrajAssistant Professor - (SG)
Department of Computer Science

Designing a deep hybridized residual and SE model for MRI image-based brain tumor prediction

April 2024

Journal of Clinical Ultrasound - SCI Improved Brain Tumor Segmentation Using UNet-LSTM Architecture

June 2024
SN Computer Science - Q2





- SPRINGER BATTON SALES



Future-Proofing Entertainment:
Navigating Market Changes in
Television and Internet video
Services through Predictive
Modeling

April 2024
Entertainment Computing - Q2



Dr. M. Guru Vimal Kumar

Assistant Professor

Department of Computer Science



Dr. L. SharmilaProfessor

Department of Computer Science

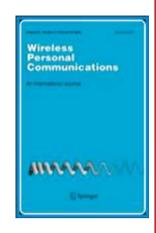
Authentication Based Remote
System for the Interaction of
Reservation Scheme of Cloud with
IoT Networks

April 2024

Wireless Personal Communications - Q2

Computer Modelling Using Visualization of Measuring Method

Wireless Personal Communications - Q2

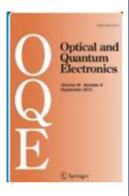




Diagnostic analysis on different carcinoma

April 2024

Optical and Quantum Electronics - Q2



Dr. C. KotteeswaranAssociate Professor
Department of Computer Science



Using social networking evidence to examine the impact of environmental factors on social Followings: An innovative Machine learning method

April 2024

Entertainment Computing - Q2



Dr. P. S. RameshAssociate Professor
Department of Computer Science

Effective IoT Based Analysis of Photoplethysmography Waveforms for Investigating Arterial Stiffness and Pulse Rate Variability

June 2024

SN Computer Science - Q2

Unveiling the Energy-Based
Validation and Verification (EVV)
Method for Perceiving and Averting
Rank Inconsistency Attacks (RIA) for
Guarding IoT Routing

June 2024

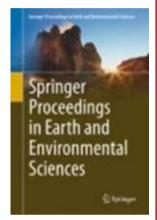
SN Computer Science - Q2

AquaNet: A Quality Monitoring
System for Rural Potable Water
Distribution Scheme Using Smart
Things

April 2024

Springer Proceedings in Earth and Environmental Sciences – Q2









Science

Swarm Intelligence with a Chaotic Leader and a Salp algorithm: HDFS optimization for reduced latency and enhanced availability

April 2024

Concurrency and Computation: Practice and Experience – Q2



Adaptation and Superior Diagnostic

Dr. D. Dhinakaran

Precision by Utilizing MBConv
Assistant Professor - (SG) Finetuned-B0 and Advanced Deep

Department of Computer

Learning

April 2024

The International Journal of Intelligent Engineering and Systems – Q2



PROGRAM OUTCOMES

- PO1 Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2 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.
- PO3 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.
- PO4 Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5 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.
- PO6 The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice
- PO7 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.
- PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9 Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10 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.
- PO11 Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12 Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES

On successful completion of the program, the graduates will be able to,

- PSO 1: Mathematical Concepts: Equipped with the knowledge to infer the mathematical models for problem solving using data structures, design and analysis of algorithms.
- PSO2: Software Development: Exhibit proficiency to analyze, design and develop applications in various domains to provide solutions using innovative ideas.
- PSO3: Transferring Skills: Demonstrate the ability to provide solutions for real world problems through acquaintance and hands-on training

Editor in Chief

Prof. Dr. S. P. Chokkalingam Dean, SoC

Editors

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