DEPARTMENT OF
INFORMATION SCIENCE
AND ENGINEERING

**ISE-THINKLET
2022 - 23 (JUN-SEP)**

EDITORIAL BOARD

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Department of Information Science and Engineering

Dr. DIVAKAR HAREKAL
Professor and Head

Message from the HOD

I am extremely happy that ISE-THINKLET 2022–23 (June - September) is being released. The magazine is a means for students and faculty to exhibit their creative skills. It provides a vibrant platform for sharing their technical knowledge and innovative ideas. The faculty of the department leaves no stone unturned in nurturing the students to express themselves within and outside of their classes.

The department's endeavors produce confident professionals, tuned to a real-time working environment. Students actively team up with the faculty to work on collaborative projects, from which they tend to imbibe the required skills and benefit a lot from their understanding of current opportunities and challenges while developing new technologies within the realm of information science. The magazine serves as a testament to their dedication and passion for learning, fostering an environment where curiosity thrives. It not only showcases academic excellence but also highlights the department's commitment to holistic development, encouraging students to explore, innovate, and push the boundaries of knowledge.

V I S I O N

To be a department for excellence in education in information science and engineering, research, innovation, and work towards empowering students for professional competence and entrepreneurial skills

M I S S I O N

M1: To provide state-of-the-art infrastructure with modern and innovative teaching methodologies.

M2: To encourage and nurture collaborative and interdisciplinary projects that aid academic and industrial research.

M3: To promote activities that helps our students inculcate ethical practices and entrepreneurial Skills.

Teaching Faculty

Name	Designation	Qualification
Dr. Divakar Harekal	Professor and Head	M.Tech., Ph.D
Dr. Kishore G.R.	Associate Professor	M.Tech., Ph.D
Dr. Abhishek Kulkarni	Associate Professor	M.Tech., Ph.D
Mrs. Rashmi K S	Assistant Professor	M.Tech., Ph.D
Mrs. Anupama V P	Assistant Professor	M.Tech., Ph.D
Mrs. Nandini D	Assistant Professor	M.Tech
Ms. Rakshatha S	Assistant Professor	M.Tech, (Ph.D)
Mr. Manjesh B N	Assistant Professor	M.Tech, (Ph.D)
Mr. Avinash N Rao	Assistant Professor	M.Tech

Non teaching faculty

Name	Designation
Mr. Abhilash G	Instructor
Mr. Prajwal Patil	Instructor
Mr.Rahul N	Instructor
Mr.Nithan N D	SDC

DEPARTMENT ADVISORY BOARD

SL NO	NAME	Designation
1	B B Shetty	Head, Regional-HR, TCS
2	Mr. Sreenivasa Ramanujam	Academic Relationship Manager, TCS
3	Dr. Shailja	Associate Prof, CSE, DSU
5	Mr. Nikhil M	Salesforce Tech Lead, Nokia Network & solutions Pvt Ltd
6	Dr. Rekha B Venkatapur	Professor and Head CSE Dept, KSIT
7	Dr. Rekha PM	Professor and Dean, Academics, Dept of ISE, JSS Academy of Technical Education
8	Dr. Kishore G R	Associate Professor, ISE, JIT
9	Dr. Divakar Harekal	Prof and Head ISE, JIT

FACULTY PUBLICATIONS

1.Prof. Anupama Vijaykumar successfully attended the AICTE Recognized Faculty Development Programme on Open Source Cyber Security Tools Conducted by Information Management and Emerging Engineering Department, held from 22/08/2022 to 26/08/2022 (One Week) and obtained Certification of Participation.

2.Prof. Manjesh BN obtained a Certificate of Appreciation for contributing as reviewer for First IEEE International Conference on Data Science and Network Security (ICDSNS – 2023) organized by Kalpataru Institute of Technology, Tiptur, held on 28th and 29th July 2023.

3.Prof. Manjesh BN obtained a Certificate of Appreciation for contributing as session chair for First IEEE International Conference on Data Science and Network Security (ICDSNS – 2023) organized by Kalpataru Institute of Technology, Tiptur, held on 28th and 29th July 2023.

STUDENT RESEASRCH PUBLICATIONS

1.Dr. Divakar H , Pragna CP (1JT19IS029), Padmaja K (1JT19IS027), Lavanya MS (1JT19IS017), and Nikhil Dhruva L (1JT19IS023), Image encryption using Cryptography , Selected for funding from KSCST: 46th Series of Student Project Programme.

2.Dr. Kishore G R, Thanmay Bharadwaj (1JT19IS053), Inchara J A (1JT19IS012), Sanjana Harish H (1JT19IS043), and Manthan B M (1JT19IS020), Machine Learning based Diabetics wound recognition using Poly approximation algorithm, Published paper in TIJER journal May 2023 in the domain of Health Science.

3.Dr. Kishore G R, Anusha M S (1JT19IS006), Amrutha M (1JT19IS003), Preksha S (1JT19IS033), and Shashank Purohit (1JT19IS046), Design and Development of IoT-based Improved Electric Smart Meter to monitor domestic energy consumption , Paper Published : UGCARE Journal TIJER - INTERNATIONAL SPACE RESEARCH JOURNAL.

4.Dr. Kishore G R, Rachana Shekar Rao (1JT19IS036), Rakshita M (1JT19IS038), Preksha S (1JT19IS033), Prajwal Kumar(1JT19IS031) and Suhasi G S(1JT19IS050), Design and Development of IoT-based Improved Electric Smart Meter to monitor domestic energy consumption, Paper Published UGCARE Journal TIJER - INTERNATIONAL SPACE RESEARCH JOURNAL

5.Prof. Nandini D, Kushal V (1JT19IS016), Ananya T K (1JT19IS004), Aishwarya A K (1JT19IS002), and Ankith Y Bhounsle (1JT19IS005), Hand Gesture Control using Computer vision technology, 1. Paper Published in the prestigious TIJER publication, which is a testament to the high-quality research and hard work put forth by our team. 2. Participated in the RV Project Exhibition 2023

6.Prof. Manjesh B N, Adarsha K (1JT19IS001), Darshan N (1JT19IS008), Nithin Kumar P (1JT19IS025) and Prajwal K (1JT19IS030), "Malware".

7.prof. Nandini D , Karthik V (1JT19IS014), Balakrishna K (1JT19IS007), Mohith G R (1JT19IS022), and H C Prabal Holla (1JT19IS010), Extended Reality for enhancing student learning, 1. Selected for funding from KSCST: 46th Series of Student Project Programme. 2. Participated in the project exhibition at Vemana College of Engineering. 3. Paper publication under process in Computer Science and Information Systems [ComSIS] journal.

8.Prof. Anupama V P, Jayashree K (1JT19IS013), Pranitha S Urs (1JT19IS032), S.Prateeksha sharma (1JT19IS040) and Supriya K (1JT19IS052), "A review on Outcome based education through learning management systems", Published paper in IJERT journal 2023 based on the domain Artificial Intelligence and Education

9.Prof. Anupama V P , Megha V (1JT19IS021), Nishmitha R Bhat (1JT19IS024)and Sharanya B R (1JT18CS046), 2022, "A survey on Heart disease prediction model ", Paper Published in IRJMETS issue 2023

10.Prof. Rashmi K S , Yashwanth B L (1JT19IS056), Priyanka Suresh (1JT19IS035), Rakshith Gowda C (1JT19IS057), and Sharada Varshini (1JT18IS053), "Maize crop yield estimation using Image Processing and Machine Learning" , The project is approved and carried out at ISRO-RRSC south under the guidance of Vinod P V senior scientist and engineer ISRO Bangalore.

11.Prof. Rashmi K S , Yamini Hari (1JT19IS055), Varuni H Kulkarni(1JT19IS054), Rashmi R Bharadwaj (1JT19IS039), and Rahul Kumar (1JT20IS400), "A deep learning based decision support system for breast cancer cell grading", Participated in National level project competition at MSRIT, 2023 and Participated in a State level project exhibition at RVITM, 2023

12.Prof. Rakshatha S ,Gopika V Pillai (1JT19IS009),Priyanka R (1JT19IS034),Sahana C (1JT19IS041) and Sandhya H(1JT19IS042), "An IoT based-automated accident alert system:a simulation" participated in NLPC 2023 (M.S.Ramaiah) , State-level Project Exhibition(Chikkamagaluru) secured I

place.

INTER-STATE COMPETITION

SL NO	Participation Of Inter-Institute Events Within State					
	NAME	Dated	Name Of The Event	Organizer	Place	Remarks
1	Varun V	09-06-2023	Hack-N-Lead	VVCE	Mysore	Participated
2	Teja S Raghavendra	09-06-2023	Hack-N-Lead	VVCE	Mysore	Participated
3	Supriya K	26-08-2022	Smart India Hackathon	GOVERNMENT OF INDIA	ONLINE	Participated

NPTEL COURSE COMPLETION

SL.NO	USN	NAME	COURSE NAME	DATE
1	1JT21IS009	Arun Kumar R Lingadal	Joy of Computing using Python	July-Oct 2023
2	1JT21IS011	Bandana Rajnandini Tikmani	Cyber Security and Privacy	July-Oct 2023
3	1JT21IS011	Bandana Rajnandini Tikmani	Privacy and Security in Online social media	July-Oct 2023
4	1JT21IS056	Sudhanva N Kishore	Ethical Hacking	July-Oct 2023

Participation of Inter-institute events within state(sports)

Sl.No	Student Name	Name of the Event	Organizer	Place	Dated	Remarks
1	Swaroop BN	Step Up 5.0	RNSIT	Bangalore	11-06-2023	Participated

List of Students Who Have Completed MOOC Courses

Sl no	USN	Name	Course Name	Date
1	1JT20IS013	Deepthi G	Introduction to Java	15-09-2022
2	1JT21IS053	Srivatsa G	AWS Cloud Foundations	21-10-2022
3	1JT21IS041	Ritu N D	AWS Cloud Foundations	22-10-2022
4	1JT21IS020	Hariharan Radhakrishnan	AWS Cloud Foundations	22-10-2022
5	1JT21IS056	Sudanva N Kishore	AWS Cloud Foundations	22-10-2022
6	1JT21IS008	Anirudh R Nijagal	AWS Cloud Foundations	22-10-2022
7	1JT21IS033	Nidhi M R	AWS Cloud Foundations	22-10-2022

INDUSTRIAL VISIT REPORT: ISRO MASTER CONTROL FACILITY , HASSAN

On the 18th of August 2023, the students of the 4th semester had the remarkable opportunity to visit the Indian Space Research Organization (ISRO) Master Control Facility (MCF) - Hassan. This educational visit provided them with an in-depth understanding of the complex and fascinating world of satellite technology.

The Master Control Facility (MCF) at Hassan plays a crucial role in the management and operation of India's satellites, ensuring their seamless functioning in orbit. During the visit, students were introduced to the intricate processes involved in satellite tracking, telemetry, and command operations. They learned how engineers continuously monitor and control the health and trajectory of satellites, ensuring they remain in their designated orbits and function optimally.

Experts at the facility explained the various challenges faced in space operations, including orbital adjustments, communication signal management, and real-time troubleshooting of satellites. The students also gained insights into the coordination required between different ground stations and the technological advancements that have enabled India to achieve remarkable milestones in space exploration.

The visit served as an invaluable experience, enriching the students' knowledge and inspiring them to explore career opportunities in the field of aerospace engineering, satellite communications, and space

technology. Witnessing firsthand the dedication and expertise of ISRO scientists and engineers reinforced their appreciation for India's growing presence in the global space industry.

PYTHON PROGRAMMING WORKSHOP

A Python Programming Workshop was successfully conducted for all the 4th-semester students of the Information Science and Engineering (ISE) branch. The workshop aimed to enhance students' programming skills, providing them with a strong foundation in Python—one of the most widely used and versatile programming languages in the tech industry today.
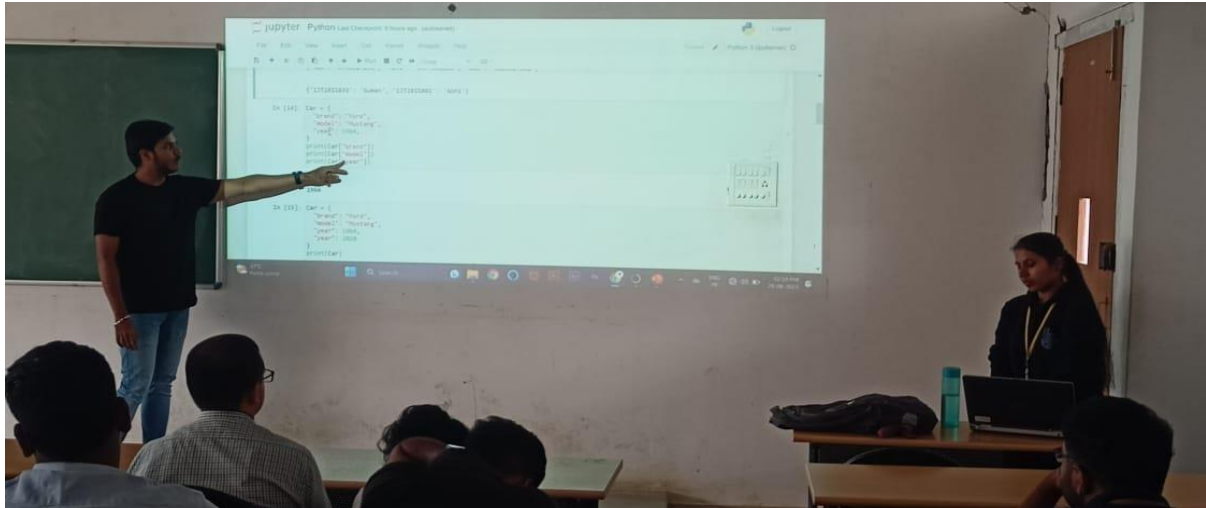
During the session, students were introduced to fundamental and advanced concepts of Python, including data types, control structures, functions, object-oriented programming, file handling, and real-world applications. The workshop also included hands-on coding exercises, interactive problem-solving sessions, and live demonstrations to help students gain practical exposure to Python's capabilities.

The facilitators, comprising experienced faculty members and industry professionals, guided the students through various applications of Python in domains such as data science, machine learning, artificial intelligence, web development, and automation. By engaging in real-time coding challenges and project-based learning, students developed a deeper understanding of how Python can be leveraged to solve complex problems efficiently.

The workshop proved to be an informative and enriching experience, equipping students with valuable programming skills that will aid them in both academic and professional pursuits. It also served as a stepping stone for those aspiring to explore advanced fields like AI, cybersecurity, and software

development.

Overall, the Python Programming Workshop was highly beneficial, fostering enthusiasm among students to further explore the vast potential of Python in the ever-evolving world of technology.

JYOTHY PREMIERE LEAGUE

JIT proudly conducts an annual staff sports and games competition, a much-anticipated event that brings together faculty and staff members to engage in a variety of recreational and competitive activities. This initiative is designed not only to encourage physical fitness but also to foster a sense of teamwork, camaraderie, and mutual encouragement among colleagues. The competition features a diverse range of sports, including team games such as cricket, football, volleyball, and badminton, as well as individual events like chess, table tennis, and athletics, ensuring that everyone has an opportunity to participate according to their interests and abilities.

Beyond the spirit of competition, this event serves as a platform for staff members to unwind from their daily responsibilities, connect with peers from different departments, and enhance their overall well-being. The enthusiasm and sportsmanship displayed during the games contribute to a vibrant and energetic workplace culture, reinforcing values such as perseverance, discipline, and teamwork. JIT remains committed to organizing such initiatives that promote holistic development, encouraging staff to stay active, motivated, and engaged in both their professional and personal lives.

Dr. Kishore G. R. from the ISE department and Dr. Manoj Kumar M. from the CSE department achieved a remarkable victory by securing 1st place in the JPL Table Tennis Tournament held on 7th August 2023. Their exceptional teamwork, agility, and skill set them apart, making them the champions of the competition. The tournament witnessed intense matches, with participants showcasing their passion for the sport. Their victory not only highlights their sporting excellence but also serves as an inspiration for students and faculty alike.

BRANCH TOPPERS 2023

Karthik V		
USN:1JT19IS014	Sem	GPA
	I	9.45
	II	9.85
	III	9.17
	IV	9.17
	V	8.92
	VI	8.92
	VII	9.15
	VIII	9.5
Cum.GPA(CGPA):9.27		

Ananya T K		
USN:1JT19IS004	Sem	GPA
	I	8.25
	II	8.95
	III	7.92
	IV	8.33
	V	8.32
	VI	8.58
	VII	8.6
	VIII	9.5
Cum.GPA(CGPA):8.56		

BEST OUTGOING STUDENT

ANANYA T K (1JT19IS004) from the Department of Information Science and Engineering has achieved the remarkable distinction of being honored with the Overall Best Outgoing Student award for the academic year 2022–23. This prestigious recognition is a testament to her exceptional academic performance, leadership qualities, and active participation in co-curricular and extracurricular activities throughout her journey at JIT. As a symbol of her outstanding achievements and dedication, she was awarded a Gold Ring, a mark of excellence and distinction. Alongside her, nine other students from the institution were also recognized for their remarkable contributions and accomplishments, further highlighting the institute's commitment to encouraging and celebrating holistic development. Ananya's achievement stands as an inspiration to her peers, reinforcing the values of hard work, perseverance, and all-around excellence.

Editor's Note

Greetings from the ISE Department!

We are excited to bring you this edition of our newsletter, showcasing the remarkable achievements, research advancements, and hands-on learning experiences within our department. From industry collaborations to student-led innovations, we continue to push the boundaries of technology and education. A heartfelt thanks to our faculty, students, and partners for their dedication and support in making these initiatives a success. We look forward to sharing more inspiring stories and milestones in the journey ahead.

Happy Reading!

Prof. Nandini D

Editor, ISE Department Newsletter