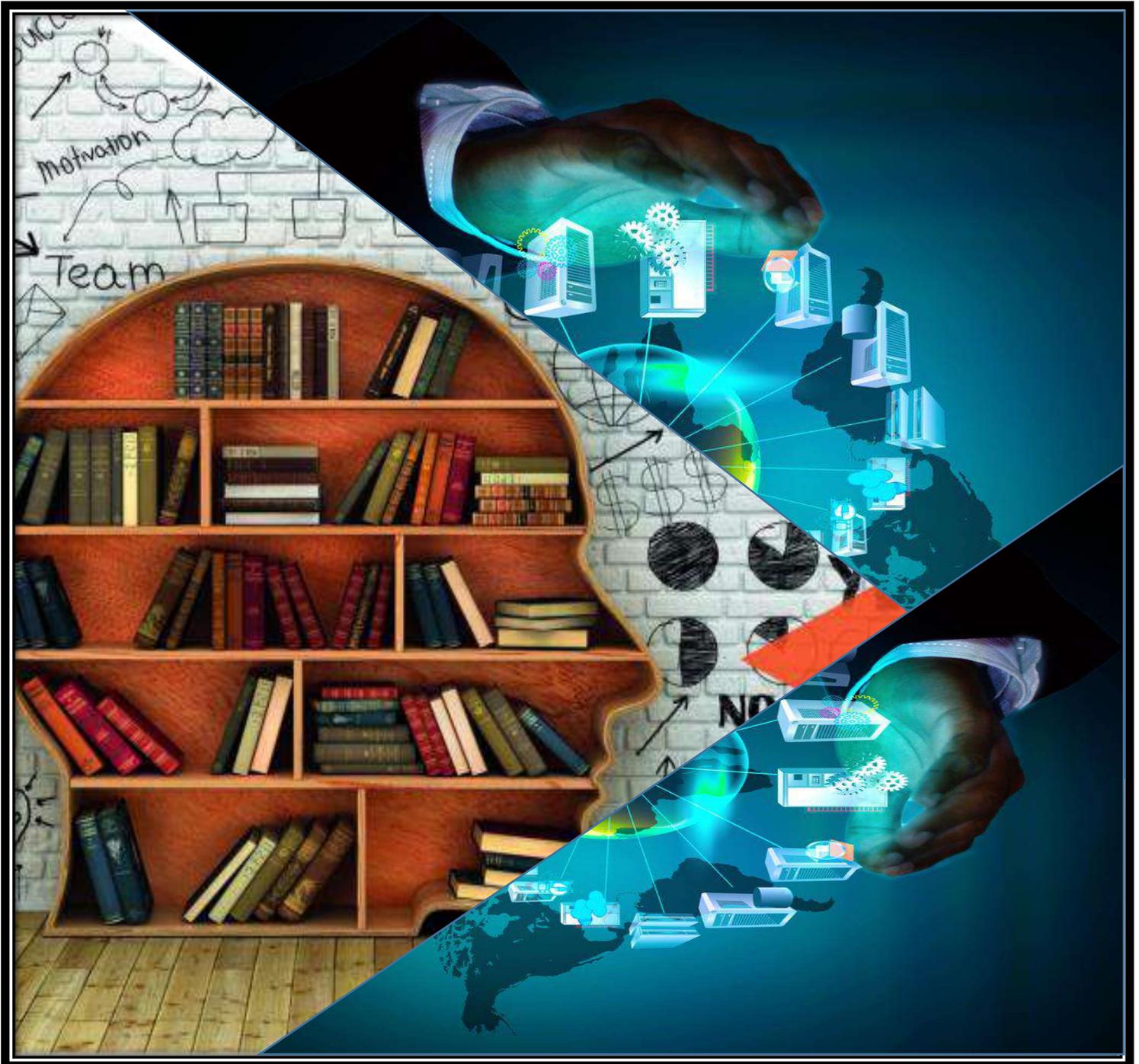


# INFOSPARK

VOLUME 2, ISSUE 2, JULY - DEC - 2020

## Departmental Newsletter

Department of Information Science and Engineering



**A.J. Institute of Engineering & Technology**

**(A Unit of Laxmi Memorial Educational Trust ®)**

(Approved by AICTE, New Delhi, Affiliated to Visvesaraya Technological University, Belagavi)

## CHIEF PATRONS



**Dr. A. J. Shetty**  
President



**Mrs. Sharada J. Shetty**  
Director



**Mr. Prashanth Shetty**  
Vice President



**Mrs. Ashritha P Shett**  
Director



**Dr. Prashanth Marla K.**  
Director



**Dr. Amitha P Marla**  
Director



**Mr. Ranga B Shetty**  
Director



**Mrs. Vinutha R Shetty**  
Director

## PATRONS



**Dr. Shantharama Rai C**  
Principal



**Dr. Nagesh H R**  
Vice Principal



## *Department of Information Science and Engineering*

### ABOUT THE DEPARTMENT

Department of Information Science and Engineering was established in the year 2016 with the establishment of AJIET, Mangaluru. The department is offering bachelor of engineering programme in Information Science & Engineering with an intake of 60 with excellent infrastructure. The department has well-qualified dedicated teaching and non-teaching staff with well-equipped laboratories to fulfil the academic needs of the students.

The major goal of the department is to produce highly knowledgeable, competent and resourceful young engineers who can excel in their respective profession.



**The greatest growing engine of change  
- "TECHNOLOGY"**

## **DEPARTMENT VISION**

To be a center of excellence in Information Science & Engineering education, research and training to meet the growing needs of the industry and society.

## **DEPARTMENT MISSION**

To impart theoretical and practical knowledge through the concepts and technologies in Information Science and Engineering.

To foster research, collaboration and higher education with premier institutions and industries.

Promote innovation and entrepreneurship to fulfill the needs of the society and

## **PROGRAM EDUCATION OUTCOMES**

**PEO1:** Analyse, design and implement solutions to the real-world problems in the field of Information Science and Engineering with multidisciplinary setup.

**PEO2:** Keep abreast with the technology, innovation and pursue higher education with high standards of social and professional ethics

**PEO3:** Develop professional and entrepreneurship skills to work effectively as an individual and in a team to meet the ever-changing goals of the organization

## **PROGRAM SPECIFIC OUTCOMES (PSO's)**

**PSO1:** Design, implement and maintain the information systems that fulfill the current needs of the industry and society

**PSO2:** Apply computational theory, storage and networking concepts to solve the day to day problems of the world

## PROGRAM OUTCOMES (PO's)

**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

**Problem Analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural science and engineering sciences.

**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.

**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.

**Modern tool usage:** Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations

**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

**Environment sustainability:** Understand the impact of the professional engineering solutions in the societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**Individual and team work:** Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.

**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

**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.

**Lifelong learning:** recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broader context of technological change.

# HOD's Message



Department of Information Science and Engineering has made tremendous progress in all areas of academic, non-academic, placement. It has taken every step to empower the students with necessary knowledge, skill and the attitude. The associations, clubs and study groups have promoted the interest and engagement of students as well as faculties. Students have shown noticeable achievements in academics, co-curricular activities and extra-curricular activities.

The "InfoSpark", Department newsletter highlights the activities and achievements of the Department in the last academic year 2019-20. I am sure that readers will be delighted to know the achievements of the Department.

Congratulating the editorial team for their sincere efforts.

## Editors Team



*Chief Editor*  
*Dr. Nagesh H R*  
*Professor & Head*

*Editor*  
*Mrs. Sharanya P S*  
*Assistant Professor*

*Co Editor*  
*Mrs. Akshatha*  
*Instructor*

## Department Statistics



#Intake - 60



#Staff - 16



#Placement - 96.5%



#Events - 6

# DEPARTMENT ACTIVITIES



Webinars



Workshops

Online Classes



ONLINE LEARNING



**Learning Never Stops @ Department**

**Interactive Online Classes**



**Live Interactive Online Classes**

**Learning @ Department**

For each semester live interactive classes are conducted for all the subjects by all the faculties by using Google Meet. Using these platforms effective classroom environment is built with class lecture and discussion session. Live interactions with the students are conducted during the class hours for better understanding of any of the subject topics.

For each of the subjects Google classroom is created and all the subject related course materials are shared to the students. Assignments, Class tests are conducted on regular basis for the active participation of students.

Online Internal Assessment is conducted using Google Meet with continuous monitoring of individual students by faculty. Supporting course materials of all subjects are given to the students for easy understanding of the subjects. Regular student performance and attendance is monitored.

**E-Learning with Digital Class**



## WEBINAR ON "DEEP LEARNING FOR SATELLITE IMAGERY"

Department of Information Science and Engineering, AJIET in association with BITES Bengaluru has organized a webinar on "Deep Learning for Satellite Imagery" for the faculty, students and research scholars of various disciplines on 06/08/2020 from 10AM to 11:30 AM through online Mode.

Resource person Dr. Sanjay R Chitnis, Chairman, Dept of Computer Science and Engineering, Dayananda Sagar University, Bengaluru gave an introduction to the Satellite Imagery with its challenges and applications. Further he gave an insight to different types of deep learning networks viz Feed forward networks, Convolution Neural Networks, U-NET, Generative Adversarial Network and custom architectures. He also provided information on datasets for the satellite imagery and code sources.

Dr Nagesh H R, HOD of ISE dept. proposed the vote of thanks. Mr. John Prakash Veigas was the convener of this webinar. Participants appreciated the webinar. E-certificates are issued to all the participants.

Dayananda Sagar University

### Deep Learning for Satellite Imagery

Dr. Sanjay R Chitnis, Dayananda Sagar University

### Applications of Satellite Imagery

Foundational Mapping    Autonomous Navigation    Anomaly Detection

Dr. Sanjay Chitnis

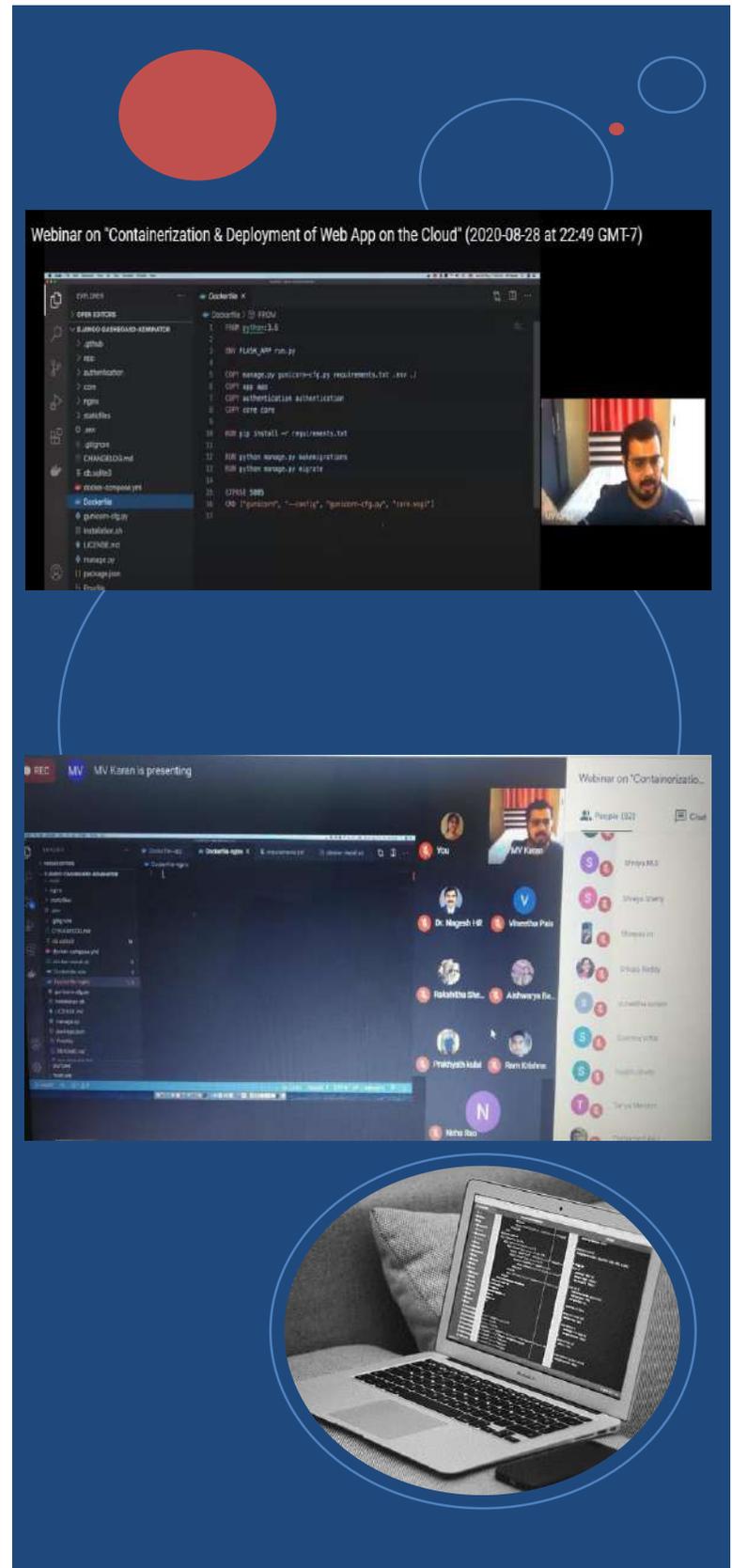
Dr. Sanjay Chitnis

## WEBINAR ON CONTAINERIZATION AND DEVELOPMENT OF WEB APP ON THE CLOUD

To make students understand this technology, a webinar on "Containerization & Deployment of Web App on the Cloud" was organized by the department of Information Science and Engineering, AJ Institute of Engineering and Technology, Mangaluru on 29th of August 2020 at 11 am. Mr. Karan MV, Developer Relations, GitHub India, Bengaluru was the resource person.

The platform used was Google Meet. Around 135+ participants from various engineering colleges and industry registered to the webinar and 85 participants have attended the live session of the Webinar.

Mrs. Sharanya PS, assistant professor, department of Information Science and Engineering, welcomed the participants and introduced the resource person. Dr Nagesh HR, Vice Principal and HOD, department of Information Science and Engineering shared his thoughts and Mrs. Shilpa Shetty A, assistant professor, department of Information Science and Engineering delivered the vote of thanks. Mrs. Sharanya PS and Mrs. Shilpa Shetty A coordinated the webinar.

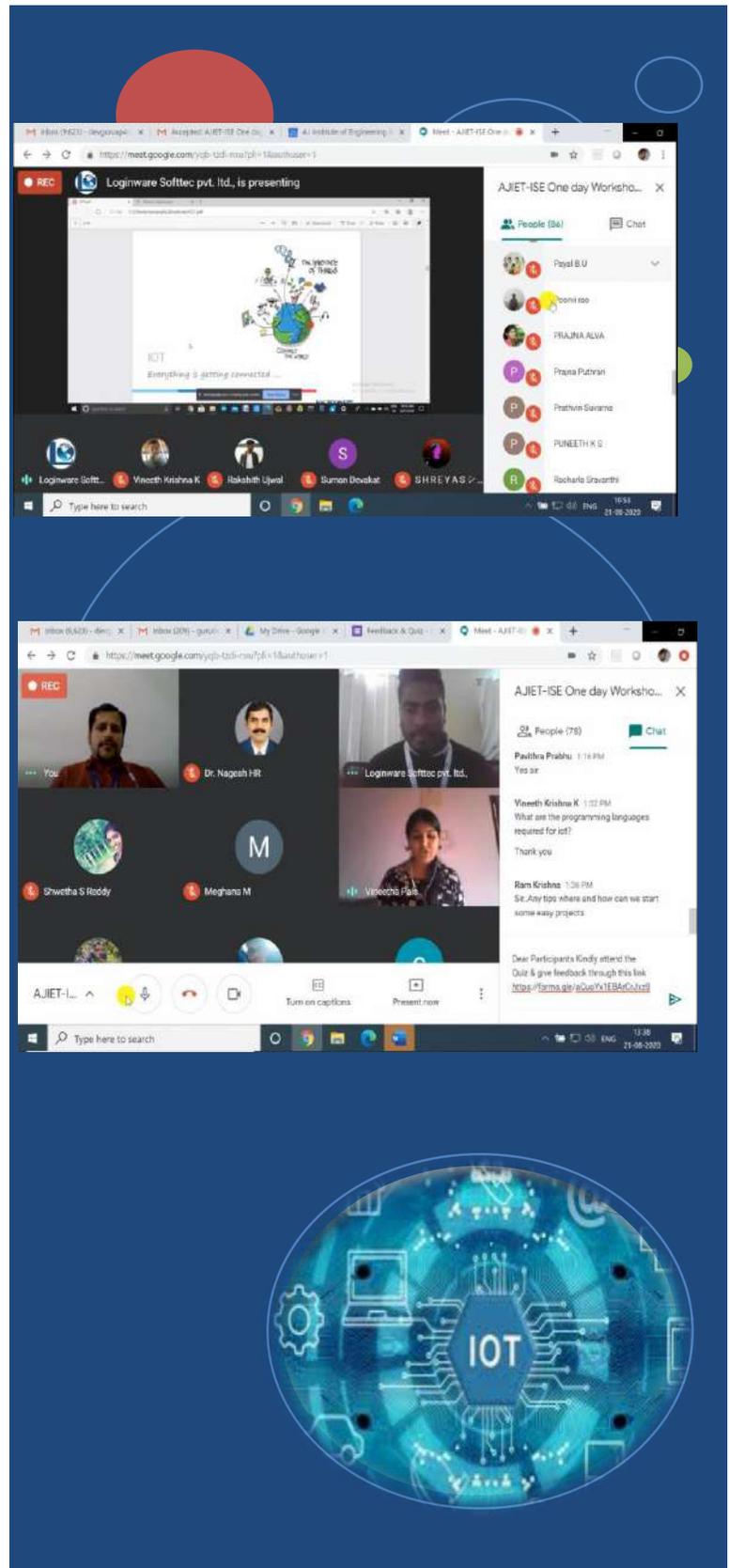


## WORKSHOP ON “PRACTICING INDUSTRIAL IOT”

Industrial Internet of Things opens abundance of opportunities in automation, optimization, intelligent manufacturing and smart industry, asset performance management, maintenance, industrial control.

To have detailed information for students about this Industrial Internet of Things, Department of Information Science & Engineering in association with Loginware Softtec Pvt Ltd, organized a one day workshop on "Practicing Industrial IOT". The workshop was conducted on 21st August 2020 in online mode. Four-hour session from 10:00 AM to 02:00 PM was delivered by resource person Mr. Thejesh P, Founder & CEO, Loginware Softtec Pvt Ltd.

Around 98 participants have attended the live session. Mr. Gurudeva S Hiremath welcomed all Participants, Dr. Nagesh H R, Vice-Principal & HOD, IS&E shared his thoughts about IOT & Mrs. Vineetha Pais delivered the vote of thanks. Mr. Gurudeva S Hiremath & Mrs. Vineetha Pais were the coordinators for this Workshop.



# FACULTY ACHIEVEMENTS

## FACULTY PUBLICATIONS



| Faculty Name      | Publication Details  |
|-------------------|--|
| Dr Nagesh H R     | <ul style="list-style-type: none"><li>✚ “Experimental Study of High Performance Computing in Three Tier Architecture for E-Health Care Application”, International Journal of Advanced Science and Technology, Vol. 29, No. 7, (2020), pp. 11078-11085.</li></ul>  |
| Dr. Govindaraj P  | <ul style="list-style-type: none"><li>✚ Govindaraj P., Sudhakar M.S . A new 2D Shape Retrieval scheme based on Phase Congruency and Histogram of Oriented Gradients. Signal, Image and Video Processing 13 (4), 771-778, Springer. (Scopus &amp; Science Citation Indexed)</li><li>✚ Govindaraj P., Sudhakar M.S. Novel Feature Extraction Strategies Supporting 2D Shape Description and Retrieval. In: Oliva D., Hinojosa S. (eds) Applications of Hybrid Metaheuristic Algorithms for Image Processing. Studies in Computational Intelligence, vol 890. Springer.</li></ul> |
| Mrs. Sharanya P S | <ul style="list-style-type: none"><li>✚ Journal Real Time Vehicle and Environment Monitoring in Smart Cities in - International Journal for Scientific Research &amp; Development   Vol. 7, Issue 12, 2020   ISSN (online): 2321-0613</li></ul>  |
| Mrs. Sushma       | <ul style="list-style-type: none"><li>✚ Journal on An Image Processing based model for calculating score in Electronics Target System Using Watershed Algorithm in International Journal for research in pplied Science and Engineering Engineerig Technology</li></ul>  |

## FACULTY INTERACTIONS WITH OUTSIDE



**Dr. Nagesh H R** has participated as distinguished resource person for the webinar and delivered a talk on **Security Issues in Wireless Sensor Networks: Current Research and Challenges** organized by Department of CSE, The Oxford College of Engineering, Bengaluru on **21.07.2020**



**Dr. Govinda Raj P** has participated as distinguished resource person and delivered a talk on **Introduction to Deep learning** at Sahyadri Institute of Engineering and Technology on **8 April 2020**



**Mrs. Sharanya P S** has participated as a resource person and delivered a talk on **“Application Tools and it’s usage”** in hands-on workshop **PRERANA – 2020** at Vivekananda college, Puttur on **02.12.2020** organized by Aakanksha Charitable Trust.

## FDP'S, WEBINARS & WORKSHOPS ATTENDED



- Dr. Nagesh H R Chaired a technical Paper Presentation session “Samrt Environment and Network Issues” at Second International Conference on Artificial Intelligence and Data Engineering Organized by NMAMIT on 22nd and 23rd December 2020.
- Dr. Nagesh H R Chaired a paper presentation session on Image Processing and Machine Learning in the XVII Control Instrumentation System Conference CISCON-2020 held on October 30-31, 2020 at Manipal Institute of Technology, Manipal.
- Dr. Nagesh H R Participated in International e-Symposium on the theme “Covid 19 Disaster: Rejuvenation of Socio-Economic and Educational Spheres” organized by A J Institute of Management, Mangaluru on Friday 4th September, 2020.
- Dr. Nagesh H R Participated in 1-day workshop on “Practicing Industrial IOT” on 21.08.2020 organized by A J Institute of Engineering and Technology.
- Dr. Nagesh H R Participated in a seminar on “Deep Learning for Satellite Imagery” on 06.08.2020 organized by A J Institute of Engineering and Technology.
- Dr. Nagesh H R Participated as mentor and evaluator for Smart India Hackathon (SIH) 2020 Online/Virtual Event at MIT, Manipal Nodal Center by MHRD Innovation Cell, Govt of India from 01.08.2020 to 03.08.2020.
- Dr. Nagesh H R Participated in a seminar on “Deep Learning for Smart City Applications” on 25.07.2020 organized by A J Institute of Engineering and Technology.
- Mrs. Vineetha Pais Has Successfully Completed 12 weeks course of “Deep Learning” with a consolidated score of 57% from July-Oct 2019 by NPTEL.
- Mrs. Shipa Shetty A Participated in the Webinar on “Containerization & Deployment of Web App on the Cloud” on 29th Aug, 2020 organized by A J Institute of Engineering and Technology

## FDP'S, WEBINARS & WORKSHOPS ATTENDED



- Mrs. Shipa Shetty A Participated in One day Workshop on "Practicing Industrial-IOT" on 21st August, 2020 organized by A J Institute of Engineering and Technology, Mangaluru.
- Mrs. Shipa Shetty A Participated in the webinar "Deep Learning for Satellite Imagery" on 06th August, 2020 organized AJ Institute of Engineering and Technology, Mangaluru in association with Board for IT Education Standards
- Mr. Rakesh M R Participated in AICTE sponsored Virtual Short Term Training Programme on AWARENESS OF INTELLECTUAL PROPERTY RIGHTS FOR ENGINEERS AND INDUSTRIALISTS (Phase-1) organized by S.G. Balekundri Institute of Technology 17 - 22 November 2020
- Mr. Rakesh M R Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Sensors Technology" from 21 - 25 September 2020 at Dr. Ambedkar Institute of Technology.
- Mr. Rakesh M R Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Leadership & Excellence" from 7 - 11 September 2020 at Government Engineering College, Haveri.
- Mrs. Sharanya P S Participated and Completed Successfully AICTE Training And Learning (ATAL) Academy Online FDP on " Internet of Things (IoT)" from 2020-10-17 to 2020- 10-21at Indian Institute of Technology Palakkad
- Mrs. Sharanya P S Participated and Completed Successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Block chain" from 2020-10-12 to 2020-10-16 at Nitte Mahalinga Adyanthaya Memorial Institute of Technology (NMAMIT).
- Mrs. Sharanya P S Has Successfully completed an online course "AI For Everyone" authorized by deeplearning.ai and offered through Coursera on 22-8-2020
- Mrs. Sharanya P S Participated in a seminar on "Deep Learning for Satellite Imagery" on 06.08.2020 organized by A. J. Institute of Engineering and Technology, Mangaluru..

# Campus Placed Students – Academic Year – 2020 -2021

*Congratulations*

**SISAinfosec**



**Ms. Prajna M**

**2.75 LPA**

**SISAinfosec**



**Mr. Shetty Yash Prakash**

**2.75 LPA**

**JARO education**



**Ms. Deepthi Vibha**

**6.6 LPA**

**JARO education**



**Ms. Shahala Sheikh**

**6.6 LPA**

**JARO education**



**Ms. Yashaswi Hegde**

**6.6 LPA**

**SilverPeak Global**



**Ms. Archana Rashmi**

**14 LPA**

## Campus Placed Students – Academic Year – 2020-2021

*Congratulations*

SilverPeak Global



Ms. Aisiri anchan

14 LPA

SilverPeak Global



Ms. Deepthi J

14 LPA

*The Department of Information Science  
& Engineering Congratulates all the  
placed students and wishes them a  
successful career ahead*

## Companies Visited for the Academic Year 2020-21

| Company Visited                       | Pool/Exclusive             | Venue    |
|---------------------------------------|----------------------------|----------|
| JARO Education Pvt Ltd                |                            | virtual  |
| Mangalore Infotech Solutions Pvt. Ltd |                            | virtual  |
| Mangalore Infotech Solutions Pvt. Ltd |                            | virtual  |
| Abyeti Technologies Pvt Ltd           |                            | virtual  |
| Mobinius                              |                            | virtual  |
| JARO Education Pvt Ltd                |                            | virtual  |
| 7EDGE                                 |                            | virtual  |
| Infosys                               |                            | virtual  |
| Global Edge Software Ltd              |                            | virtual  |
| Wipro Elite NTH - 2021                |                            | virtual  |
| High Peak Software                    |                            | virtual  |
| SilverPeak Global                     | Exclusive                  | AJIET    |
| Wolken Software Pvt Ltd               |                            | virtual  |
| CodeCraft Technologies                | Exclusive                  | AJIET    |
| WebWings Global Solutions Pvt Ltd     | Exclusive                  | AJIET    |
| SISA InfoSec                          |                            | virtual  |
| SLK Software                          | Online(first),pool(second) | Sahyadri |
| Novigo Solutions Pvt Ltd              | Exclusive                  | AJIET    |
| Robosoft                              |                            | virtual  |
| 42Gear Mobility System Pvt Ltd        | Pool                       | virtual  |
| Juego Studio                          |                            | virtual  |

## EXAMINATION RESULTUS

### EVEN & ODD SEMESTER EXAMINATION RESULTS - ACADEMIC YEAR 2019-20

#### ODD SEMESTER

Jan - June - 2020

| Semester | Total    |        |            |
|----------|----------|--------|------------|
|          | Appeared | Passed | Percentage |
| I Sem    | 62       | 59     | 95         |
| III Sem  | 58       | 42     | 72.40      |
| V Sem    | 22       | 17     | 77         |
| VII Sem  | 13       | 13     | 100        |

#### EVEN SEMESTER

July - Dec - 2020

| Semester | Total    |        |            |
|----------|----------|--------|------------|
|          | Appeared | Passed | Percentage |
| II Sem   | 61       | 61     | 100        |
| IV Sem   | 58       | 58     | 100        |
| VI Sem   | 22       | 22     | 100        |
| VIII Sem | 13       | 13     | 100        |

# Department of Information Science and Engineering

## Major goal of the department

- ✦ To produce highly knowledgeable, competent and resourceful young engineers who can excel in their respective profession.
- ✦ To be a center of excellence in Information Science & Engineering education, research and training to meet the growing needs of the industry and society.
- ✦ To impart theoretical and practical knowledge through the concepts and technologies in Information Science and Engineering.
- ✦ To foster research, collaboration and higher education with premier institutions and industries.
- ✦ Promote innovation and entrepreneurship to fulfill the needs of the society and industry.

## Features of the Department

- ❖ Smart Classrooms
- ❖ Well-equipped Laboratory with great software support
- ❖ Soft skill training programs
- ❖ Real time projects and exposure to industry
- ❖ Excellent teaching staffs with adopting innovativeness to excel in the academics
- ❖ Skilled supporting staff with good experience
- ❖ Effective syllabus coverage
- ❖ Faculty prepared study material
- ❖ Consistently achieving excellent results in all the semesters





# DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING



**A.J. Institute of Engineering & Technology**

**(A Unit of Laxmi Memorial Educational Trust ®)**