

# INFOSPARK

VOLUME 2, ISSUE 1, JAN - JUNE - 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*

## Department Statistics



#Intake - 60



#Staff - 16



#Placement - 96.5%



#Events - 16

# DEPARTMENT ACTIVITIES

Webinars



Workshops



Online Classes





# Learning Never Stops @ Department

## E-Learning Hub @ Department 2019 Pandemic

Learning @ Department

### Live Interactive Online Classes

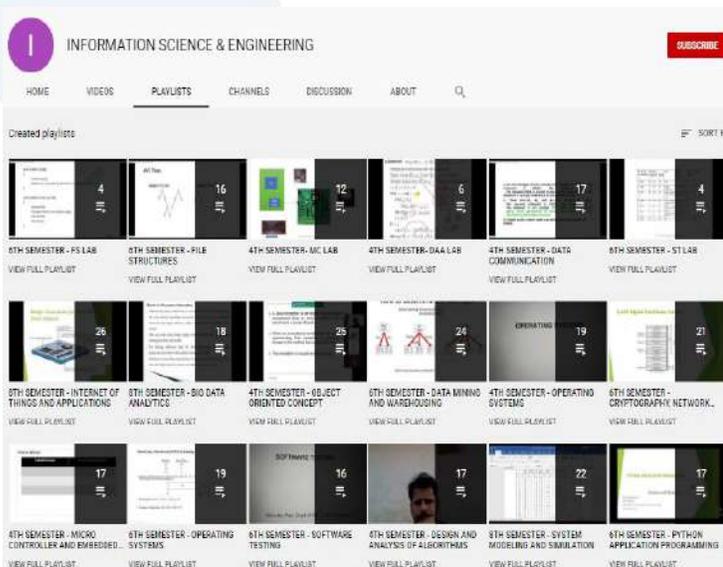


### YouTube Lecture Videos

For each semester live interactive classes are conducted for all the subjects by all the faculties by using Online tools like: Zoom app, Google Meet, YouTube Live. Using these platforms effective classroom environment is built with class lecture and discussion session.

For each of the subjects Google classroom is created and all the subject related course materials are shared to the students. Assignments, Class tests

Department has created online YouTube channel which is used as a platform to upload the lecture videos of all the subjects and labs. Lecture videos are pre-recorded with high quality resolutions videos and uploaded to the YouTube. YouTube link is shared to the students as per the subject schedules in the timetable. YouTube lecture videos can be accessed at any time by the students as per their convenience to understand the subject concepts clearly. Pandemic situation helped in evolving a new mode of e-learning.



STAY HOME



STAY SAFE

Keep Learning

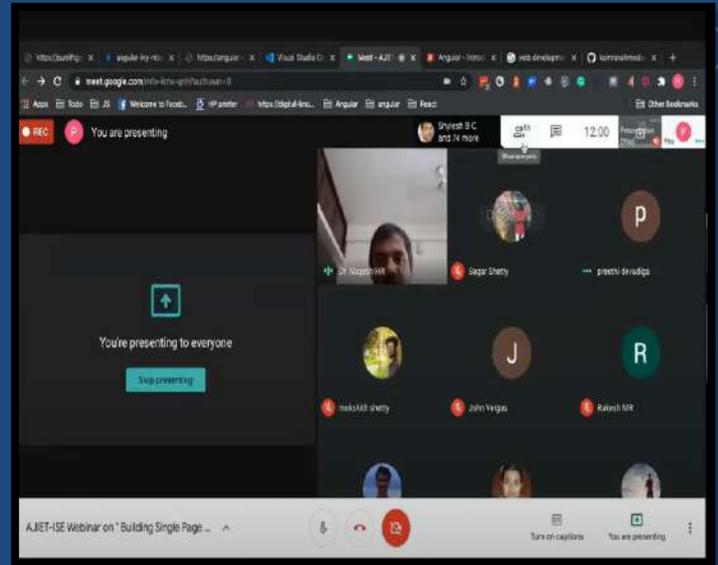
AJIET E-LEARNING HUB

<https://www.ajiet.edu.in/pages/youtube.php>

## WEBINAR ON “BUILDING SINGLE PAGE APPLICATION USING ANGULAR JS”

A Webinar on “**Building Single Page Application using Angular JS**” organized by Information Science and Engineering Department, AJIET on 11/07/2020 at 10AM – 12PM in Google Meet Platform for faculty, students and research scholars of various disciplines.

Resource person Mr. Punith Gowda N, Java Developer, JavaScript developer at Paytm, delivered the following content with hands on demonstration: Introduction to Angular concepts, Modules, Components, Services and dependency injection, Architecture of Angular Framework, Demonstration of creating a Single Page Application. Dr Nagesh H R, HOD-IS&E proposed the vote of thanks to the participants and resource persons. Participants appreciated the webinar in their feedback. E-certificate is issued to the participants. Mr. John Prakash Veigas and Mr. Rakesh M R coordinated the online webinar.



## WEBINAR ON "DEEP LEARNING FOR SMART CITY APPLICATIONS"

In recent trends Deep learning and AI is acquiring its significance in various sectors. Deep learning AI is able to learn without human supervision, drawing from data that is both unstructured and unlabeled.

To understand better how this Deep learning is applied in creating smart cities, department of ISE organized a Webinar on "**Deep Learning for Smart City Applications**" on 25th July 2020 from 11:00 AM to 01:00 PM in Online Mode. Resource person for the webinar was Mr. Sandeep Kumar Erudiyathan, Senior Engineer, Department of Engineering Technology & Mentoring, Robert Bosch Engineering Solutions (RBEI), Bengaluru.

Around 120 Participants have attended the live session. Mr. Gurudev S H introduced resource person & welcomed the Participant, Dr. Nagesh H R, HOD-IS&E delivered the vote of thanks. E-certificates were distributed to all the participants, Mr. Gurudeva S Hiremath was the convener of this Webinar.

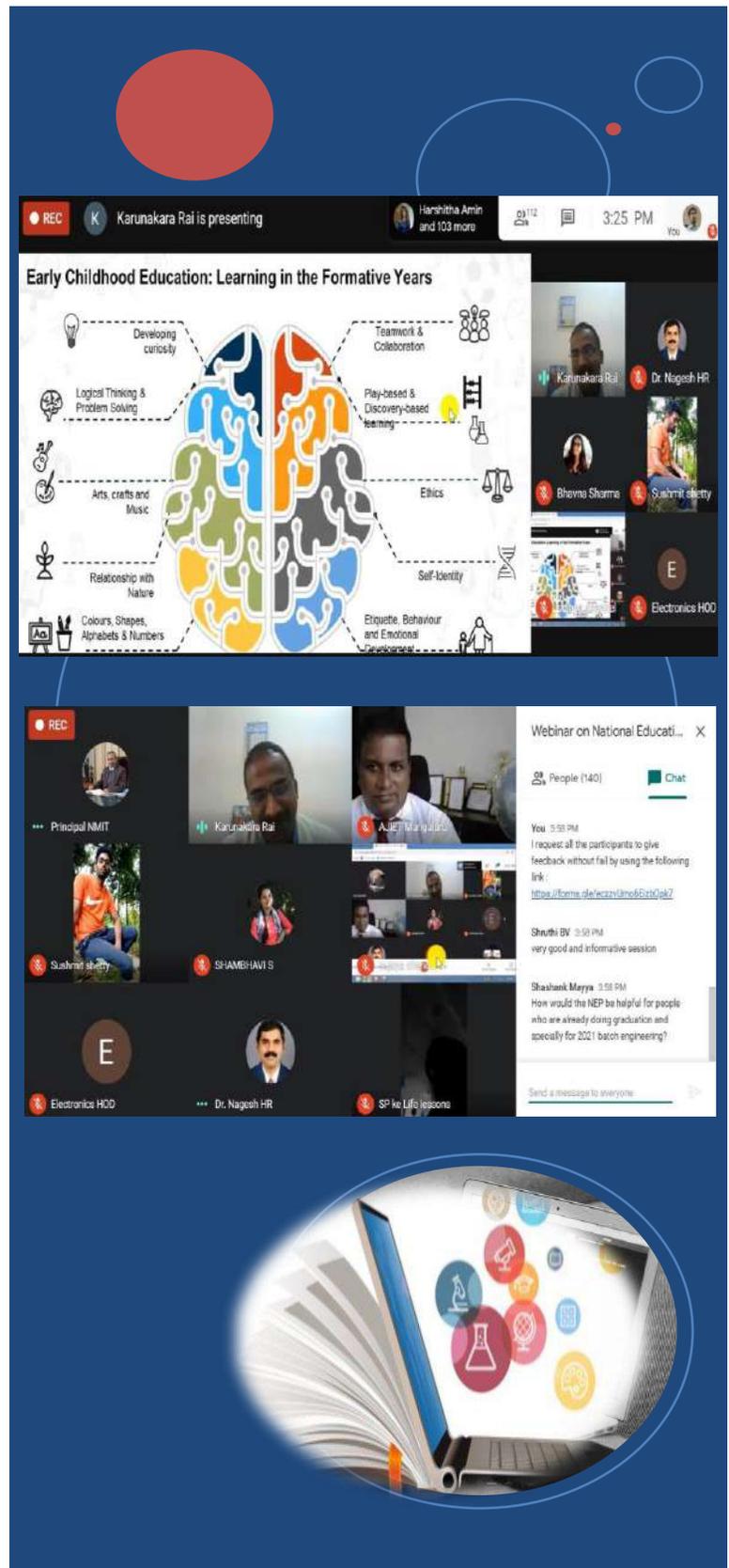


## WEBINAR ON "NATIONAL EDUCATION POLICY (NEP) - 2020"

The National Education Policy (NEP)-2020 leans much more towards the enabling aspect of technology, without fully dwelling on the need for building the capabilities required for engaging meaningfully with it.

To understand in better-way about NEP-2020 department of ISE, conducted a Webinar on " National Education Policy (NEP) 2020". The webinar was held on 13th August 2020 through Online Mode from 03:00 PM to 04:00 PM. It was delivered by resource person Dr. Karukara Rai, Associate Professor, Department of Electronics& communication Engineering, NMIT,Bengaluru.

Around 130 Participants have attended the live session. Dr. Nagesh H R, Vice-Principal & HOD, IS&E introduced resource person & welcomed all Participants and Mr. Gurudeva S Hiremath was the coordinator for this Webinar.



# FACULTY ACHIEVEMENTS

## FACULTY PUBLICATIONS



### Faculty Name

### Publication Details

**Dr Nagesh H R**

- ✚ “An IoT Based Smart Grocery Monitoring System”, in Global Conference on A Conference on ADVANCED SMART AND SUSTAINABLE TECHNOLOGIES IN ENGINEERING(GCASSTE2020) 30-31 January,2020.
- ✚ “A Novel Key Scheduling Algorithm for Lightweight Cryptographic Applications”, International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.1, pp. 682-684 <https://doi.org/10.30534/ijatcse/2020/96912020> January – February 2020.
- ✚ “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.
- ✚ “A Novel Approach to Optimize the Performance of Hadoop Frameworks for Sentiment Analysis”, in International Journal of Open Source Software and Processes (IJOSSP), vol. 10, Issue 4. pp 44-59, October-December 2019 <https://doi.org/10.4018/IJOSSP/2019/100103>
- ✚ “An IoT Based Smart Grocery Monitoring System”, in Global Conference on A Conference on ADVANCED SMART AND SUSTAINABLE TECHNOLOGIES IN ENGINEERING(GCASSTE2020) 30-31January,2020.
- ✚ “A Novel Key Scheduling Algorithm for Lightweight Cryptographic Applications”, International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.1, pp. 682-684 <https://doi.org/10.30534/ijatcse/2020/96912020> January – February 2020.

**Mr John Prakash  
Veigas**

- ✚ Cloud Computing Adoption and its Impact in India, International Research Journal of Engineering and Technology (IRJET), vol 6, issue 6, pp 3128-3130, June 2019

- ✚ IRIS RECOGNITION SYSTEM: A SURVEY, International Journal for Science and Advance Research In Technology, June 2019, vol 5 issue 6, pp. 607-609
- Mr.Gurudev S Hiremath**
- ✚ Gurudev S Hiremath , Bharath S J & Darshan N , “Digital Communication - An Automated notice cum circulation system” in NATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING TRENDS & MANAGEMENT at PESITM,Shimoga.
  - ✚ Gurudev S Hiremath , SuhasRamji , “panther Swift – A game by using Unity-3D” in the state level paper presentation “INVENTIO-2014” conducted on 16thOctober 2014 at GMIT Davangere.
- Mrs. Vineetha Pais**
- ✚ Journal on Survey on Swarm Intelligence Algorithm and Application in International Journal for Scientific Research & Development, ISSN Volume 7, Issue 02, 2019, Page, 2027-2029
  - ✚ Journal on Swarm Intelligence A Survey in International Journal of Research in Engineering, Science and Management, Volume-2, Issue-5, May-2019.
- Mrs. Shilpa Shetty A**
- ✚ Journal Real Time Vehicle and Environment Monitoring in Smart Cities in - International Journal for Scientific Research & Development | Vol. 7, Issue 12, 2020 | ISSN (online): 2321-0613
- Mr. Rakesh M R**
- ✚ Journal on Swarm Intelligence – A Survey in International Journal of Research in Engineering, Science and Management, Volume-2, Issue-5, May-2019
  - ✚ Journal on Design and implementation of window comparator circuit using operational amplifier in International Journal for Innovative Research in Multidisciplinary Field, volume - 5, issue - 8, AUG – 2019, pp 06-08
- Mrs. Sharanya P S**
- ✚ Journal on An IoT Based Smart Healthcare System Using Raspberry Pi, in International Journal of Research and Scientific Innovation (IJRSI)
  - ✚ Journal on Real Time Vehicle and Environment Monitoring in Smart Cities in - International
- Mrs. Sushma**
- ✚ Journal on Text Identification System for Grammatical Translation of English Language in 8th world conference on Applied Science, Engineering and management
  - ✚ Journal on A Survey on Different Technologies and Protocols Used in Internet of Things(IOT) in National Conference on Advances in Science, Engineering and Management-19

## FACULTY INTERACTIONS WITH OUTSIDE WORLD



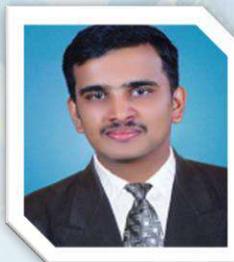
**Dr. Nagesh H R has participated as distinguished resource person for the webinar and delivered a talk on Security Issues in Wireless Sensor Networks: Current Research and Challenges organized by Department of CSE, The Oxford College of Engineering, Bengaluru on 21.07.2020**



**Mr. John P John Prakash Veigas has participated as a distinguished resource person and delivered a talk on "Introduction to CNN and implementation of image recognition using CNN" in Four Days FDP on Image Processing and Data Science on 27<sup>th</sup> June 2020**



**Mrs. Sharanya P S has participated as a resource person and delivered a virtual talk on "Google Apps and Microsoft Tools" in impact 30 Belagavi District on 02.06.2020 organized by Aakanksha Charitable Trust**



**Mr. Rakesh M R awarded ELITE certificate in NPTEL Certification course in Digital Image Processing and Embedded system using ARM.**



**Mrs. Vineetha Pais has successfully completed a NPTEL course on "Compiler Design".**

## FDP'S, WEBINARS & WORKSHOPS ATTENDED



- Dr. Nagesh H. R has participated in the One-Week Faculty Development Programme on “Artificial Intelligence”, from 22<sup>nd</sup> to 26<sup>th</sup> May 2020 organized by AIET in association Computer Society of India, National Youth Council of India, and Brain O Vision Solutions India Pvt., Ltd. Hyderabad.
- Dr. Nagesh H. R has participated in 5-Day on-line workshop on “Incorporating Universal Human Values in Technical Education” organized by AICTE, New Delhi from 02.05.2020 to 06.05.2020.
- Dr. Nagesh H. R has Successfully Completed 8 weeks course of “Programming in C++” with a consolidated score of 98% from Jan-March 2020 by NPTEL.
- Mr. John Prakash Veigas has presented about “Introduction to CNN and implementation of image recognition using CNN” in the four days FDP on “ImageProcessing and Data Science” held during 26 – 29th June 2020 at Canara Engineering College, Mangaluru.
- Mr. John Prakash Veigas has participated in the 4 -days FDP on “Image Processing and Data Science” from 26 – 29 June 2020 (Online) at Canara Engineering College.
- Mr. John Prakash Veigas has Completed AICTE-NPTEL organized Online Certification course on “Deep Learning” from July-Oct 2019.
- Mr.Gurudeva Shastri Hiremath attended 5-Days workshop on Deep Learning at PESITM, at Shivamogga from 23/07/2019 to 26/07/2019
- Mr.Gurudeva Shastri Hiremath Attended 3-Days FDP on National-Level-Research-Workshop at SJBIT, Bangalore from from 23/01/2019 to 25/01/2019
- Mrs. Vineetha Pais has Participated in a National level Workshop on “Network Simulation using NS-3 organized in Alva’s Institute of Technology, Mijar.
- Mrs. Vineetha Pais has participated in the 4 -days FDP on “Image Processing and Data Science” from 26 – 29 June 2020 (Online) at Canara Engineering College.

## FDP'S, WEBINARS & WORKSHOPS ATTENDED



- Mrs. Vineetha Pais has participated in the webinar on “ An Enterprise Cloud journey with AWS” organized by Vivekananda Institute of Technology, Bengaluru on 27th June 2020
- Mrs. Vineetha Pais has participated in the webinar on “Avenues in E-learning for Post-COVID Scenario” Organized by Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Udupi on 12 June 2020.
- Mrs. Shilpa Shetty has participated in the webinar on “ An Enterprise Cloud journey with AWS” organized by Vivekananda Institute of Technology, Bengaluru on 27th June 2020
- Mrs. Shilpa Shetty has attended 5 - Days Workshop on “Applications of Python Programming in Data Analytics and Machine Learning – Research Perspective” organized by AIT with CSI from 15 – 19 June 2020
- Mr. Rakesh M R has participated in the 4 -days FDP on “Image Processing and Data Science” from 26 – 29 June 2020 (Online) at Canara Engineering College.
- Mr. Rakesh M R has Participated in 3-days online FDP on “innovation opportunities in emerging electronics and communication technology” from 19th to 21st June 2020 organized by DVR & Dr HS MIC college of technology, Andrapradesh
- Mr. Rakesh M R has Participated in TEQIP-III sponsored online Faculty Development Programme on “RECENT ADVANCES IN AUTOMATION AND NETWORKING” held from 18th to 20th June 2020 organized by Basaveshwar Engineering College (Autonomous), Bagalkot, Karnataka, India
- Mr. Rakesh M R has Participated in the 5-Day FDP on “Research trends in image processing” held during 15th to 19th June 2020 organized by GATES institute of technology AndraPradesh.
- Mr. Rakesh M R has Participated in the webinar on ‘Mendeley Software for References’ Organized by the AMC Engineering College on 13 June 2020

## FDP'S, WEBINARS & WORKSHOPS ATTENDED



- Mr. Rakesh M R has Participated in the FDP on “System Modeling – Mathematics to Describe Engineering Applications” organized by Gogte Institute of Technology, during 15th to 19th June, 2020
- Mr. Rakesh M R has Participated in 7-days national level online FDP on python programming organized by Government College for Woman Kolar in association with spoken tutorial, IIT Bombay held from 05 - 11 June 2020.
- Mr. Rakesh M R has Participated in 7-days National Level Online Faculty Development Program on "Online Teaching-Learning Processes using ICT Tools for Education 4.0" organized by SVP CET Nagpur, in association with Computer Society of India from 8th to 13th June, 2020
- Mr. Rakesh M R has Participated in Virtual FDP on “Research Trends in Information Technology” Organized by Smt. Kamala & Sri Venkappa M. Agadi College of Engineering & Technology, Laxmeshwar, from 10 - 12 June 2020
- Mr. Rakesh M R has Participated in 3 Days FDP on "Recent Trends in Wireless Sensor Networks and Communication System" organized by VSM'S SOMASHEKAR R. KOTHIWALE INSTITUTE OF TECHNOLOGY, NIPANI from 03 – 05 June 2020.
- Mr. Rakesh M R has Participated AICTE-NPTEL organized 8 weeks Faculty development program on Embedded system design using ARM from JAN-MARCH 2020.
- Mr. Rakesh M R has Participated in the webinar “The world of circuit simulation” organized by IETE Mysuru on 30th June 2020
- Mrs. Sharanya P S has participated in 4 FDP on “Applied Machine Learning Using Python” from 9-6-2020 to 12-6-2020 organized by NMAM Institute of Technology, Nitte.
- Mrs. Sharanya P S has participated in the 4 -days FDP on “Image Processing and Data Science” from 26 – 29 June 2020 (Online) at Canara Engineering College.

## FDP'S, WEBINARS & WORKSHOPS ATTENDED



- Mrs. Sharanya P S has Participated in 5-days Virtual FDP on Natural Language Processing(NLP) during 30 June -4 July 2020 at REVA University Bangalore.
- Mrs. Sharanya P S has Participated in 2 days Virtual Faculty Development Program on Research Perspectives in Futuristic Computing Technologies held on 7th July – 8th July 2020 organized by Dayananda Sagar University, Bengaluru.
- Mrs. Sushma has participated in the 4 -days FDP on “Image Processing and Data Science” from 26 – 29 June 2020 (Online) at Canara Engineering College.
- Mrs. Sushma has Participated in the webinar on “ An Enterprise Cloud journey with AWS” organized by Vivekananda Institute of Technology, Bengaluru on 27th June 2020
- Mrs. Sushma has Participated in the Free National Level Webinar on “PCB Designing using Fusion 360” organized by iQmetrics Solutions Pvt. Ltd. On 20th June 2020.
- Mrs. Sushma has participated in the Four-Day Online FDP on “Applied Machine Learning Using Python” from 9-6-2020 to 12-6-2020 organized by NMAM Institute of Technology, Nitte.

## Campus Placed Students – Academic Year – 2018 -2019

*Congratulations*

**Robosoft Technologies**



**Ms. Shreya V R**

**3.5 LPA**

**IBM**



**Ms. Jennifer**

**3 LPA**

**IBM**



**Mr. Mrinal**

**3 LPA**

**Codecraft Technologies**



**Mr. Athish Rai**

**3.5 LPA**

**[24] 7.ai**



**Ms. Simi Shetty**

**2.7 LPA**

**Wipro**



**Mr. Athish Rai**

**3.5 LPA**

Campus Placed Students – Academic Year – 2019 -2020

*Congratulations*

SilverPeak Global



Ms. Devika

3.5 LPA

SilverPeak Global



Ms. Rahisha

3.5 LPA

SilverPeak Global



Ms. Salabha

3.5 LPA

SilverPeak Global



Ms. Shreya Shetty

3.5 LPA

SilverPeak Global



Ms. Simi Shetty

3.5 LPA

Ethnus Consultancy



Ms. Prithvi M S

2.26 LPA

Campus Placed Students – Academic Year – 2019 -2020

*Congratulations*

Lancelot Technology



Ms. Salabha

2 LPA

Vee Technologies Pvt



Ms. Tanvi

2.2 LPA

TradeOcean



Ms. Swasthik Shetty

2.5 LPA

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

# Final Year Students Project – Academic Year – 2019 -2020

| Project Name  | Abstract of the Project   | Student Name  | Photo   |
|---|---|---|---|
| <p><b>Real Time Hand Sign Recognition for the deaf and hearing-impaired people using machine learning</b></p> | <p>Sign language is an incredible advancement that has grown over the years. Unfortunately, there are some drawbacks that have come along with this language. Not everyone knows how to interpret a sign language when having a conversation with a deaf and dumb person. There is always a need to communicate using sign language. One finds it hard to communicate without an interpreter. To solve this, we need a product that is versatile and robust. We need to convert the sign language so that it is understood by common people and will help them to communicate without any barriers. The main purpose of this project is to eliminate the barrier between the deaf and dumb and the rest. While sign language is very essential for deaf-mute people, to communicate both with normal people and with themselves, is still getting less attention from the normal people. The importance of sign language has been tending to ignored, unless there are areas of concern with individuals who are deaf-mute. One of the solutions to talk with the deaf-mute people is by using the mechanisms of sign language.</p> | <p>ATHISH RAI<br/>SALABHA S<br/>JENISHIA</p>                        |    |
| <p><b>Automation on conversion of waste into fertilizer using IOT for urban areas</b></p>                     | <p>Automation on conversion of waste into fertilizer using IOT uses an 8ft container, which is divided into four levels each of 2ft. Initially at depth of 2ft soil is filled within the container with a sensor attached to its wall. The sensor detects the level of the soil, if it reduces from the marked level the sensor alerts through Web server and SMS to the concerned people. In the next level, the organic combination, which consists of cow dung, salt and jaggery, is filled for the next 2ft. In the organic combination if any of the component's ratio decreases from the marked level the sensor detects the change and informs the user through mobile application the number of organic components to be added. At each level there are set of sensors. The next level is filled with degradable waste that society disposes into the container. When it reaches the level of 2ft the sensors detect the level of waste. When society disposes the degradable waste into the proposed system it is mixed with the organic components which results in the formation of the fertilizers.</p>                 | <p>SHREYA<br/>SHETTY,<br/>SHREYA<br/>VR<br/>DEVIKA,<br/>RAHISHA</p> |  |

# Final Year Students Project – Academic Year – 2019 -2020

| Project Name                                       | Abstract of the Project   | Student Name  | Photo   |
|--|---|---|---|
| <p><b>Music generation using LSTM model</b></p>    | <p>Recent advances in deep neural networks have enabled algorithms to compose music that is comparable to music composed by humans. However, few algorithms allow the user to generate music with tunable parameters. The ability to tune properties of generated music will yield more practical benefits for aiding artists, filmmakers, and composers in their creative tasks. In this report, we introduce LSTM model that is capable of composing music conditioned on a specific mixture of composer styles. Our innovations include methods to learn musical style and music dynamics. We use our model to demonstrate a simple technique for generating music by giving starting sequence as input to the system. Evaluation of our model using this model shows that we have improved over the LSTM approach.</p>  | <p>SWASTIK S<br/>SHETTY, SIMI<br/>M SHETTY<br/>TANVI<br/>SHETTY, PRITH<br/>VI M S</p> |    |
| <p><b>Sentiment analysis for search engine</b></p> | <p>Sentiment analysis is an application of natural language processing. It is also known as emotion extraction or opinion mining. This is a very popular field of research in text mining. The basic idea is to find the polarity of the text and classify it into positive, negative or neutral. It helps in human decision making. To perform sentiment analysis, one has to perform various tasks like subjectivity detection, sentiment classification, aspect term extraction, feature extraction etc. Emotions, opinions and sentiments play an important role in all human life. There are various compelling use cases of social media sentiment analysis: consumers referring to online reviews to help them make better purchase decisions; businesses eager to understand market preferences in order to improve their offerings; politicians aspiring to gauge public response to their policies or speeches. Not surprisingly, one of the hottest areas of research in social analytics is sentiment analysis.</p> | <p>JENNIFER,<br/>MRINAL</p>   |  |

*Congratulations*



Project titled “**Automation on conversion of waste into fertilizer using IOT for urban areas**” with student team Shreya Shetty, Shreya VR, Devika, Rahisha under the guidance of Dr. Nagesh H R and Gurudeva S Hiremath has been selected for Karnataka State Council for Science and Technology (KCST) grant and awarded with 5000 Rs of grand amount.

Project titled “**Real Time Hand Sign Recognition for the deaf and hearing-impaired people using machine learning**” with student team Athish Rai, Salabha S, Jenishia under the guidance of Mrs. Vineetha Pais and Mrs. Sharanya P S has been identified as Innovative project by VTU and awarded with 5000 Rs of grand amount.

Project titled “**Automation on conversion of waste into fertilizer using IOT for urban areas**” with student team Shreya Shetty, Shreya VR, Devika, Rahisha under the guidance of Dr. Nagesh H R and Gurudeva S Hiremath has been identified as Innovative project by VTU and awarded with 5000 Rs of grand amount.

CLASS TOPPERS - Academic Year 2019 -2020



Final Year



Mr. Athish Rai

8.43



7.92

Ms. Rahisha M

Third Year



Ms. Khathijathul Sana

8.27



8.19

Ms. Yajna J

Second Year



Ms. Zubaida Shaima

8.71



8.63

Ms. Nikita

First Year



Mr. Shreyas

9.30



9.25

Mr. Kishan Kumar



## COCURRICULAR ACHIEVEMENTS



| Student Name     | Semester        | Event Details                   | Prize/Participation   |
|------------------|-----------------|---------------------------------|---|
| Neha rao         | 6 <sup>th</sup> | Sambhram Fest, SDIT             | Questionaria, electro excellence                              |
| Deepthi vibha    | 6 <sup>th</sup> | Sambhram Fest, SDIT             | Mock press ,treasure hunt ,dumb art,anathashari,quiz          |
| Deepthi j        | 6 <sup>th</sup> | Sambhram Fest, SDIT             | 1.Plasticine art and 2.Face fantasy                           |
| Khyathi          | 6 <sup>th</sup> | Envision Fest, Srinivas college | Cognizance, tech hunt, fear mask                              |
| Khyathi          | 6 <sup>th</sup> | Technofia Fest, AIET Mijar      | Inquest, dare to do, treasure hunt                            |
| Kathijathul sana | 6 <sup>th</sup> | Envision Fest, Srinivas college | Minute to win,trace torch,tech hunt / Tech hunt 1st prize     |
| Fathima k        | 6 <sup>th</sup> | Envision Fest, Srinivas college | tech hunt,techbuzz,minute to win it / 1st prize in tech hunt  |
| Prajna M         | 6 <sup>th</sup> | Envision Fest, Srinivas college | Cognizance,Tech hunt,trace torch,fear mask,vinyasa            |
| Prajna M         | 6 <sup>th</sup> | Technofia Fest, AIET Mijar      | Inquest,dare-to-do,comic con,any queries,clue minati          |
| YAJNA.J          | 6 <sup>th</sup> | Envision Fest, Srinivas college | Technobuzz,trace torch,tech hunt,fear mask                    |
| YAJNA.J          | 6 <sup>th</sup> | Technofia Fest, AIET Mijar      | Inquest,any queries,clue- minati,dare to do                   |
| Archana Rashmi   | 6 <sup>th</sup> | Envision Fest, Srinivas college | Technobuzz,trace torch,tech hunt,fear mask / 3rd in fear mask |
| Archana Rashmi   | 6 <sup>th</sup> | Technofia Fest, AIET Mijar      | Dare to do,any queries?,comic con, Inquest,clue-minati        |
| Nikhitha S A     | 6 <sup>th</sup> | Sambhram Fest, SDIT             | Quiz,treasure hunt,damsharats                                 |



## COCURRICULAR ACHIEVEMENTS



| Student Name         | Semester        | Event Name     | Prize/Participation  |
|----------------------|-----------------|----------------|--|
| Amisha Shetty        | 4 <sup>th</sup> | Sambhram Fest  | Quiz, tech puzzle, electro charades,code war   |
| Mohammed Ainan       | 4 <sup>th</sup> | Sambhram Fest  | Quiz, Code war, Electro sharade, Tech puzzle, Treasure hunt, Dumb sharade                        |
| Dhanush S Shetty     | 4 <sup>th</sup> | Technofia Fest | comic-on,counter strike,quize,interview buddy,tresure huntter                                    |
| Nikita               | 4 <sup>th</sup> | Sambhram Fest  | 1.Quetioneria 2. Electro excellence 3.Code war   |
| Saamiya              | 4 <sup>th</sup> | Sambhram Fest  | Electro charade,questnaria,tech puzzle   |
| ROHIT S              | 4 <sup>th</sup> | Envision Fest  | Minute to win it,Xera,Fear Mask,Wipeout  |
| Sudish               | 4 <sup>th</sup> | Envision Fest  | Technobuzz,Fearmask,Wipe Out,Xera / First In Fearmask  |
| Sudish               | 4 <sup>th</sup> | Sambhram Fest  | Quiz,Tech puzzle,Code war,Electro charade,Music villa,Dumb art, Mission improbable,Stump by dump |
| Swathi k s           | 4 <sup>th</sup> | Sambhram Fest  | Quetionaria(quiz), Tech puzzle Electro charade(dumb charades)                                    |
| Harshith Kumar       | 4 <sup>th</sup> | Envision Fest  | Technobuzz,Fear mask,Wipe Out,Xera / Fear Mask - 1st   |
| Harshith Kumar       | 4 <sup>th</sup> | TCS Tech Bytes | Statewide Engineering IT Quiz  |
| Krithi T             | 4 <sup>th</sup> | Sambhram Fest  | Quetioneria ,code war,electro excellence   |
| Nayana sk            | 4 <sup>th</sup> | Sambhram Fest  | Tech pazzle, quetionaria,electro excellence.   |
| Soniya Y Puthran     | 4 <sup>th</sup> | Envision Fest  | Wipe out, Minute to win it, Fear Mask, Picharades  |
| A Haritha Saraswathi | 4 <sup>th</sup> | Sambhram Fest  | Quetionaria, Tech Puzzle, Electro-Excellence   |
| Pavithra             | 4 <sup>th</sup> | Sambhram Fest  | Questionaria, Electro excellence, Code war   |
| Dishanth S           | 4 <sup>th</sup> | Envision Fest  | Minute win it  |
| Shreya               | 4 <sup>th</sup> | Envision Fest  | Fear mask, minute to win it,bulls eye, scrap sculptures / Scrap sculptures                       |
| Nishitha             | 4 <sup>th</sup> | Technofia Fest | Behind the mask(face painting),clue minati   |
| Sagar Shetty         | 4 <sup>th</sup> | Envision Fest  | Fear mask,Picharades,Wipeout,Minute to win it  |
| Sagar Shetty         | 4 <sup>th</sup> | Technofia Fest | Inquest,Tech-charads,comic con,clue-minate   |
| Sagar Shetty         | 4 <sup>th</sup> | Workshop       | Workshop on Virtual Labs   |
| Payal B.U            | 4 <sup>th</sup> | Sambhram Fest  | Quetionaria,tech puzzle,electro excellence   |
| Dwithi               | 4 <sup>th</sup> | Envision Fest  | Minute to win it,Bulls eye,Scrap sculptures,fear masks / Runner-up in scrap                      |



## COCURRICULAR ACHIEVEMENTS



| Student Name       | Semester        | Event Name     | Prize/Participation   |
|--------------------|-----------------|----------------|---|
| Meghashree         | 4 <sup>th</sup> | Sambhram Fest  | Code war(coding challenge),questionarea(quiz),electro-exellence(quiz)                                     |
| Chandan Gunaga     | 4 <sup>th</sup> | Technofia Fest | GD and Mock interview,Quiz,photography,tech charades,bid buzz / Phtography,quiz,tech charades final round |
| Chandan Gunaga     | 4 <sup>th</sup> | Sambhram Fest  | Talent hunt,treasure hunt / Treasure hunt 2nd place   |
| Sharanya           | 4 <sup>th</sup> | Envision Fest  | Wipe out, Fear mask, Minute to win it, Picharades   |
| Pavithra Karanth   | 4 <sup>th</sup> | Technofia Fest | Inquest,comic con   |
| Pavithra Karanth   | 4 <sup>th</sup> | Sambhram Fest  | Quiz,technical dumbsharats  |
| Amritha.n          | 4 <sup>th</sup> | Envision Fest  | Scrap sculptures,fear mask, bulls eye,cognizance / 3rd place scrap sculptures.                            |
| Akhil Kumar K S    | 4 <sup>th</sup> | Envision Fest  | Minute to win it,Fear mask,Wipe out   |
| Akhil Kumar K S    | 4 <sup>th</sup> | Technofia Fest | INQUEST, COMIC CON , TREASUREHUNT( Clue minati)   |
| Navitha hegde      | 4 <sup>th</sup> | Sambhram Fest  | Quetionaria, tech puzzle, electro excellence  |
| Loran Rhia D'Souza | 4 <sup>th</sup> | Envision Fest  | Scrap sculptures, bulle eye, Cognizance / 3rd place in scrap sculptures.                                  |
| Loran Rhia D'Souza | 4 <sup>th</sup> | Technofia Fest | Inquest ,Comic con , bid buzz ,intimidaters,tech charades.  |
| Devadiga Ramya     | 4 <sup>th</sup> | Envision Fest  | Mehendika   |
| Amisha Shetty      | 4 <sup>th</sup> | Sambhram Fest  | Code cracking, tech puzzle, electro charades,quiz,treasure hunt, dumb charades                            |
| Tanya mendon       | 4 <sup>th</sup> | Sambhram Fest  | Code cracking, tech puzzle, electro charades,treasure hunt, dumb charades                                 |
| Chaithrashree      | 4 <sup>th</sup> | Envision Fest  | Picharades ,Fear mask ,Wipe out ,Minute to win it   |
| Chaithrashree      | 4 <sup>th</sup> | Technofia Fest | Inquest,comic-con,techarards,clue-minate  |
| Shree devi         | 4 <sup>th</sup> | Envision Fest  | Picharades ,Fear mask,Wipe out ,Minute to win it  |
| Shree devi         | 4 <sup>th</sup> | Technofia Fest | Behind the mask,comic -con,techarards, clue-minate  |
| Neha naik          | 4 <sup>th</sup> | Envision Fest  | Minute to win it, bulls eve ,fear mask, scrap sculptures  |

## SPORTS ACHIEVEMENTS



| Sem | Name          | Event   | Prize                                    |
|-----|---------------|---|--|
| 6th | NIHAD ABDULLA | Mangalore zone in VTU University level cricket selections held in chikballapur.   |  |
| 6th | NIHAD ABDULLA | T10 league conducted by Torpedoes Cricket Association in which I was a part of LAXMI MEMORIAL EDUCATION TRUST.                              | runner's up in T10 league                |
| 6th | NIHAD ABDULLA | Karnataka State Cricket Association U-16 Mangalore zone (2015).   |  |
| 6th | NIHAD ABDULLA | Runner's up in Karnataka State Cricket Association and Dakshin Kannada Cricket Association inter-PUC matches conducted in Mangalore (2017). | runner's up in State Cricket Association |
| 6th | NIHAD ABDULLA | The District level inter-PUC Table Tennis Tournament-2017.  |  |

**"INFORMATION IS  
THE OIL OF THE 21ST CENTURY,  
ANALYTICS IS  
THE COMBUSTION ENGINE"**

# 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 ®)**