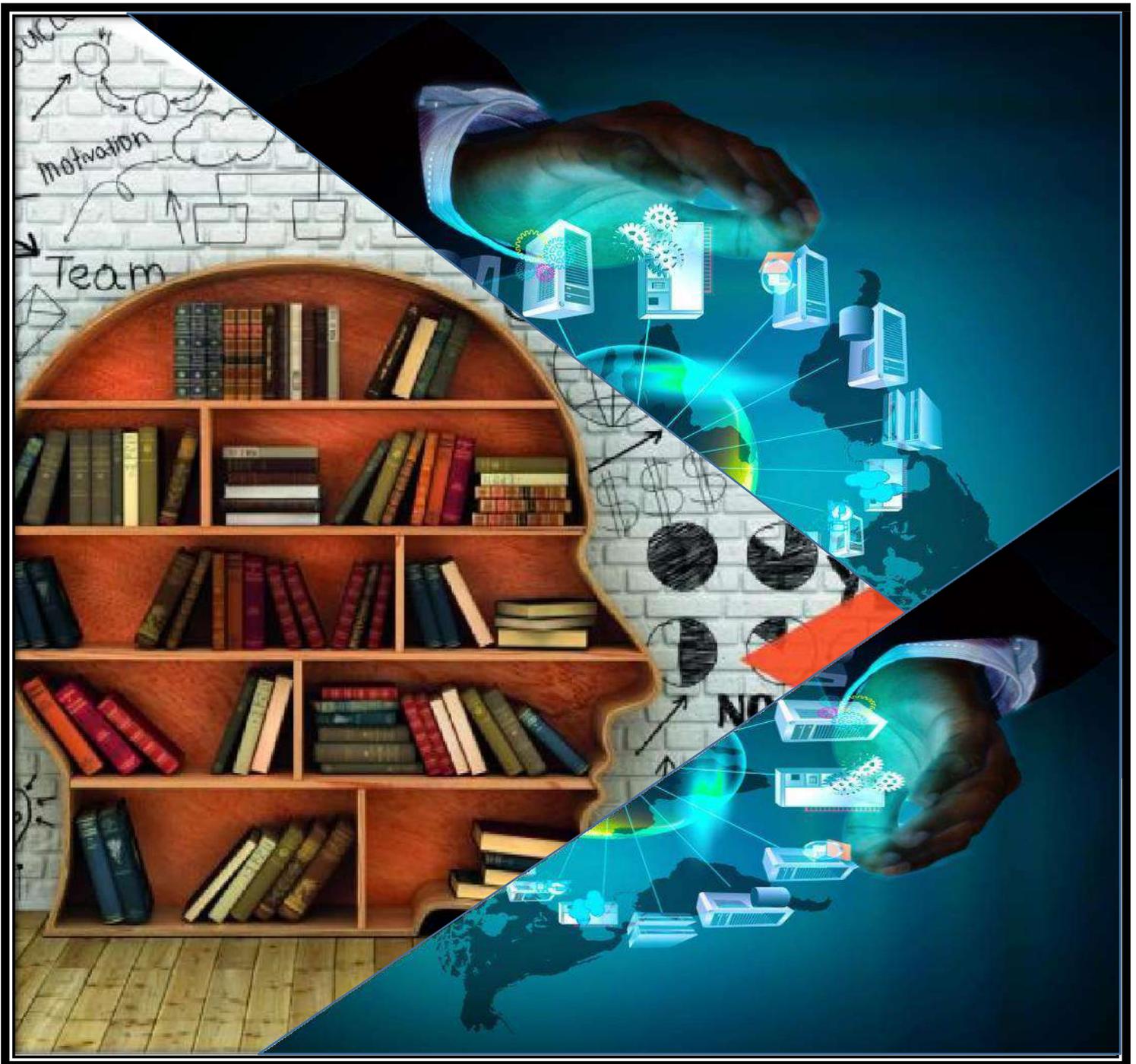


INFOSPARK

VOLUME 3, ISSUE 2, JUNE - DECEMBER, 2021
VOLUME 3, ISSUE 1, JAN - MARCH - 2021

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)



OUR PATRONS



Dr. A.J. Shetty
President, LMET



Mr. Prashanth Shetty
Vice President, LMET



Dr. Shantharama Rai C
Principal, AJIET

AJIET....

About Us

A.J. Institute of Engineering & Technology (AJIET) was established in the year 2016. The latest addition to the celebrated list of professional educational institutes promoted by Laxmi Memorial Education Trust ®. Located in Kottara Chowki, the campus is the only engineering campus within the Mangaluru city.

A stone throw away from the National Highway, the campus stands out for the greenery developed within the city limits and the state of the art infrastructure built on it. Making rapid progress in every aspect of engineering education, AJIET has gained good reputation for itself in academics. Co-curricular & extra-curricular activities and placements. MoU's with leading corporates, incubation centres in the campus have provided the edge to our students in attaining professional excellence.

VISION

To produce top-quality engineers who are groomed for attaining excellence in their profession and competitive enough to help in the growth of nation and global society.

MISSION

- To offer affordable high-quality graduate program in engineering with value education and make the students socially responsible.
- To support and enhance the institutional environment to attain research excellence in both faculty and students and to inspire them to push the boundaries of knowledge base.
- To identify the common areas of interest amongst the individuals for the effective industry-institute partnership in a sustainable way by systematically working together.
- To promote the entrepreneurial attitude and inculcate innovative ideas among the engineering professionals.



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

Chandan – 3rd
Year ISE

Department Statistics



#Intake - 60



#Staff – 15



#Placement



#Events - 3

DEPARTMENT ACTIVITIES

**ALUMINI
MEET**



**FRESHER'S
DAY**



**Online
Classes**





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

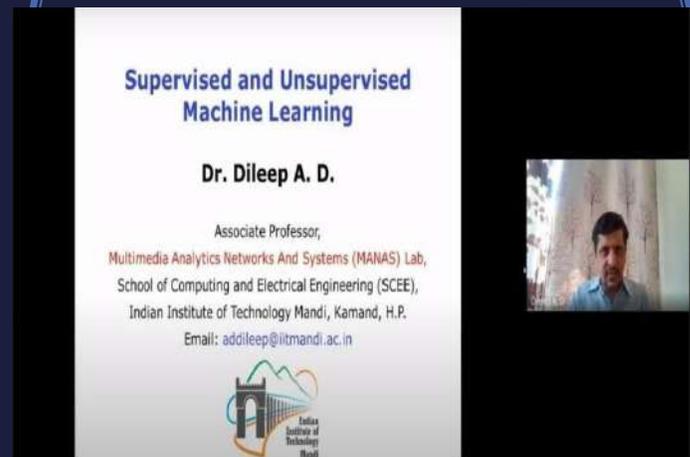


Machine Learning Using Python Programming

Department of Information Science and Engineering in Association with Departments of Computer Science & Engineering and Electronics and Communication Engineering organized 5-Day Faculty Development Programme on Machine Learning Using Python Programming from 01.06.2021 to 05.06.2021. More than 400 participants have registered and attended the FDP through on-line Google meet app and YouTube streaming from various institutes of our country.

First day started at 9.55AM with an inaugural programme in which the college principal Dr Shantharama Rai C addressed the participants, the programme convenor and Head of the Dept of ISE, Dr. Nagesh H.R welcomed the participants and introduced the Resource person of the day **Dr.Veena T, Associate Professor, Dept. of CSE, NIT, Goa**. She presented the topic **Introduction to Machine Learning and Feature Optimization** in which she focused on different types of Machine Learning and addressed some of the Real- World problems like Handwritten Recognition.

Second day started at 9.55AM, the Head of the Dept of CSE, Dr Antony P.J welcomed the participants and introduced the Resource person of the day **Dr.Dileep A.D Associate Professor, School of Computing and Electrical Engineering, IIT Mandi**. He presented the topic **Supervised and**



Unsupervised Machine Learning.

Third day started at 9.55 AM, the programme convener and Head of the Dept of ISE, Dr. Nagesh H.R welcomed the participants and introduced the Resource person of the day **Mr. Prakhyath Rai, Data Analyst, MResult Corporation, Mangaluru**. He presented the topic Python Programming for Machine Learning. He revised supervised and unsupervised learning.

Fourth day started at 9.55 AM, Mrs Aruna Kumari G K coordinator of the programme welcomed the participants and introduced the Resource person of the day **Mr. Prakhyath Rai, Data Analyst, MResult Corporation, Mangaluru**. He presented the topic Python Packages for Machine Learning. He focused on Python Programming packages like Numpy, Pandas by conducting Hands-on session on Jupyter Notebook using Anaconda.

Fifth day started at 9.55 am, the programme convenor and Head of the Dept of ISE, Dr. Nagesh HR welcomed the participants and introduced the Resource person of the day **Dr. S Murugan, Professor, Dept. of CSE, Sathyabhama Institute of Science & Technology, Chennai**. He presented the topic Deep Learning Techniques.

The valedictory of the FDP was conducted after completion of all the sessions. In the beginning of the valedictory function many of the participants have shared their experiences in attending the FDP and all the participants have appreciated the FDP.



MOBILE APPLICATION DEVELOPMENT

The Department of Computer Science and Engineering in association with Departments of ECE and ISE organized a 5-Day National level Skill Development Program(SDP) on "Mobile Application Development".

The objective of this Skill Development Program(SDP) was to build the essential

Mobile Application Development skill set among students and faculties. The program intended to explore the fundamentals of mobile application development and to provide insights into its latest industry applications. The SDP also provided solutions to the laboratory experiments of VTU prescribed syllabus of the subject "Mobile Application Development".

The SDP had 1212 registered participants from across India.

First day of the SDP started at 9.55AM with an inaugural programme, Dr. Shantharama Rai C principal of our college addressed the participants, the programme convenor and Head of the Dept of CSE, Dr. Antony P J welcomed the participants and introduced the Resource person of the day Mr. Chetan S P, Founder & CEO, Tackle – D Private Limited. The Session started with a talk on "Mobile Application Development" and later programs on : Visiting Card & Minimal functional Calculator Application were discussed and post lunch hands on session was conducted.

Second day started at 9.55AM, Mr. John Prakash Veigas, welcomed the participants and the first

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5 Days Skill Development Program On

Mobile Application Development

Organized by
Dapt. of Computer Science and Engineering
in Association with Dept. of ISE and ECE
From 14-06-2021 to 18-06-2021

SPEAKERS

- Mr. Chetan S P, Tackle - D Pvt. Ltd.
- Mr. Thejesh P, Wipro Ltd, Bengaluru
- Mrs. Rashmi G, BITS Pilani, Bengaluru
- Mr. Mohammad Amroevilla, iNurture, Bengaluru

SCHEDULE

14 JUN - 0001	10.00 AM - 11.00 AM	Talk 1: Introduction to Mobile Application Development. Mr. Chetan S P Founder & CEO, Tackle - D Private Limited, Roshalnagar
	11.00 AM - 01.00 PM	Demonstration-1&2: Visiting Card & Minimal functional Calculator Application. Mr. Chetan S P Founder & CEO, Tackle - D Private Limited, Roshalnagar
15 JUN - 0001	10.00 AM - 12.00 PM	Demonstration-3&4: Registration Activity & Wallpaper Changer Application. Mr. Chetan S P Founder & CEO, Tackle - D Private Limited, Roshalnagar
	12.00 PM - 01.00 PM	Talk 2: XAMARIN open-source platform for building Mobile Application. Mr. Thejesh P, Technical Manager, Wipro Ltd., Bengaluru
16 JUN - 0001	10.00 AM - 11.00 AM	Talk 3: Firebase (NoSQL) in Mobile Application Development. Mrs. Rashmi G, Guest Faculty, BITS Pilani, Bengaluru
	11.00 AM - 1.00 PM	Demonstration 3&4: Counter Application, Parsing XML & JSON Data. Mr. Chetan S P Founder & CEO, Tackle - D Private Limited.
17 JUN - 0001	10.00 AM - 11.00 AM	Talk 4: iOS in Mobile Application Development. Mr. Mohammad Amroevilla, Senior Faculty, iNurture Pvt. Ltd, Bengaluru
	11.00 AM - 1.00 PM	Demonstration 7&8: Text to Speech Application, Call & Save Application. Mr. Chetan S P Founder & CEO, Tackle - D Private Limited, Roshalnagar
18 JUN - 0001	10.00 AM - 12.00 PM	Discussion Session: Mobile Application Mini projects. Mr. Chetan S P Founder & CEO, Tackle - D Private Limited, Roshalnagar
	12.00 PM - 01.00 PM	Talk 5: Future Trends in Mobile Application Development Mr. Chetan S P Founder & CEO, Tackle - D Private Limited, Roshalnagar

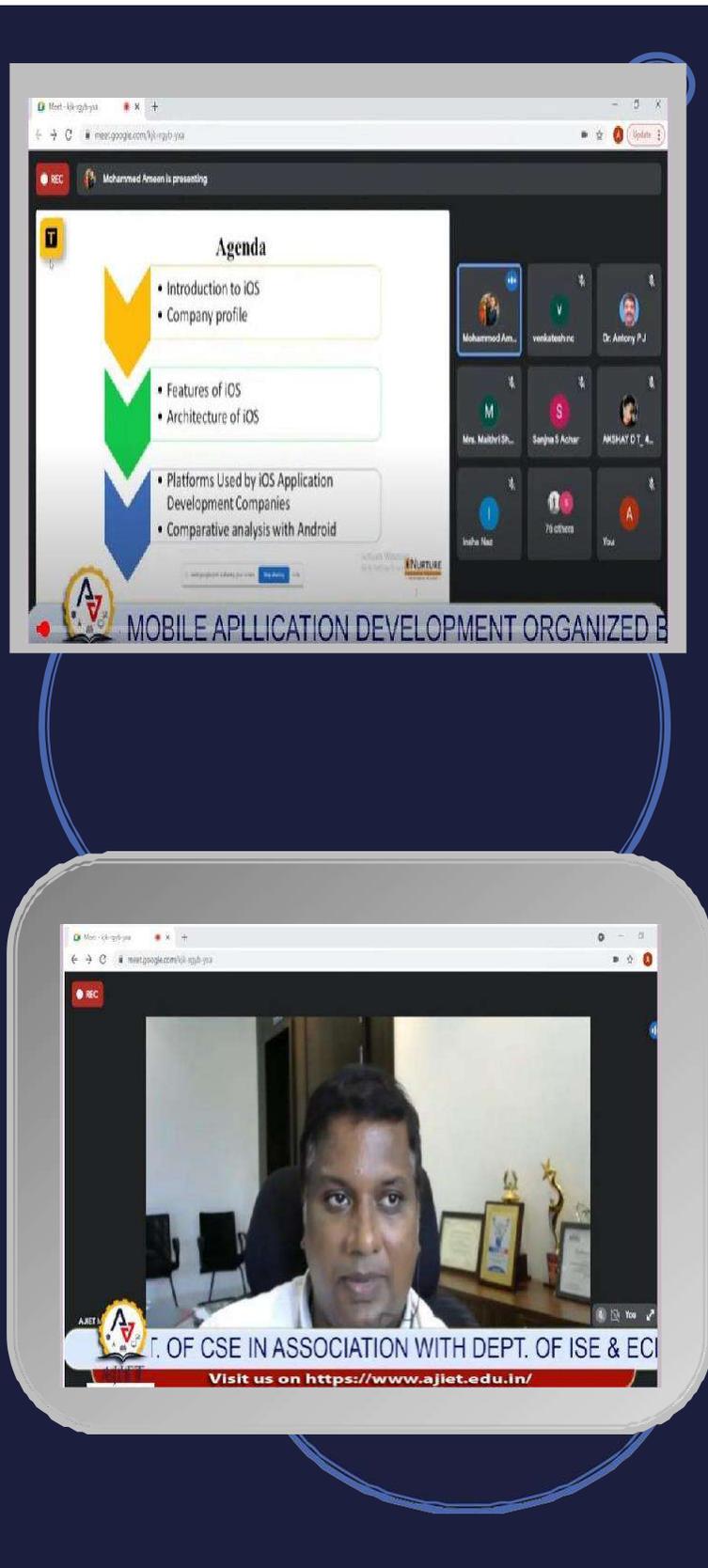
session was on Demonstration of programs on Registration Activity & Wallpaper Changer Application by Mr. Chetan S P.

Third day started at 9.55AM, Dr. Gnaneshwar Swarnadh, HOD-ECE welcomed the participants and introduced the resource person and the first session was technical talk on Firebase (NoSQL) in Mobile Application Development by Mrs. Rashmi G, Guest faculty, BITS Pilani, Bengaluru. Mr. Manhu Kiran delivered the vote of thanks for the session. The next session at 11 am was Demonstration of Counter Application, Parsing XML & JSON Data by Mr. Chetan S P.

Fourth day started at 9.55AM, Mr. Basappa Kodada welcomed the participants and introduced the resource person and the first session was technical talk on iOS in Mobile Application Development- Mr. Mohammad Ameenulla, Senior Faculty, i-Nurture Pvt. Ltd, Bengaluru. Mr. Pradeep Kumar delivered the vote of thanks for the session. The next session at 11 am was Demonstration of Text to Speech Application, Call & Save Application by Mr. Chetan S P.

Fifth day started at 9.55AM, Mr. Sheryas Harady welcomed the participants and the resource person and the first session was Mobile Application Mini projects discussions by Mr. Chetan S P. The next session at 12 -01pm was a technical talk on Future Trends in Mobile Application Development - Mr. Chetan S P.

The valedictory of the SDP was conducted after completion of all the sessions. In the beginning of the valedictory function many of the participants shared their experiences in attending the FDP and appreciated all the sessions and content discussed.



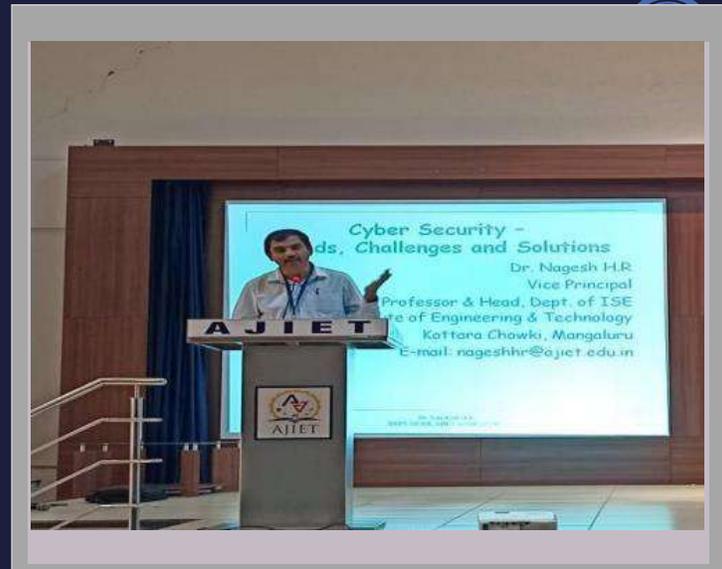
Technical talk on “Cyber Security- Trends, Challenges & Solutions “

Dr. Nagesh H R ,Vice Principal ,Professor and Head, Dept. of ISE, AJIET , MANGALURU, has delivered a Technical talk on ”Cyber Security-Trends, Challenges and Solutions ” to the students of Information Science & Engineering department. This event was organized for the second-year, third-year students and final year students of ISE branch.

Mr. Ram Krishna, Student of Vth sem Information Science & Engineering was the Master of Ceremony for the function. Ms. Ashika Saldana Vth sem Information Science & Engineering gave the welcome speech.

Dr. Nagesh H R, Vice Principal, Professor and Head, Dept. of ISE, explained about Cyber Security Challenges And Its Emerging Trends On Latest Technologies and Cyber Security plays an important role in the field of information technology. Securing the information have become one of the biggest challenges in the present day.

Ms. Megha, 7th semester Information Science & Engineering, proposed vote of thanks. Staff members of ISE were present for the event.



FACULTY ACHIEVEMENTS



The grant of Rs.4.44 Lakhs is being sanctioned for the research proposal entitled as "Design and Implementation of Security Solutions for HealthCare Systems" submitted by Dr. Nagesh H.R, Kiran Kumar V. G, Basappa B Kodada under VTU Research Grants Scheme - 2021

Project Titled “Image Regeneration For Old Damaged Monument Reel Pictures Using Deep Learning” With Student Team Meghashree, Pavithra, Yahaswini And Zubaida Shaima Under The Guidance Of Mr. John Prakash Veigas Has Been Selected For Karnataka State Council For Science And Technology (Kcst) Grant And Awarded With 4500 Rs Of Grand Amount.

Project titled “Chronic disease prediction after covid-19 machine learning” with student team Pratheeksha, Saamiya, Swapna and Tanya Mendon under the guidance of Dr Suresha D has been selected for Karnataka State Council for Science and Technology (KCST) grant and awarded with 3000 Rs of grand amount.

Project titled “Breast Cancer Histopathology Image Processing Using Machine Learning” with student team Abhijith P P, Krithi T, Megha Jose and Nikita under the guidance of Mrs Aruna Kumari has been selected for Karnataka State Council for Science and Technology (KCST) grant and awarded with 5000 Rs of grand amount.



- ✚ DR. NAGESH H.R, PROFESSOR AND HEAD, DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING PUBLISHED A JOURNAL "WBAN IMPLEMENTATION IN A PARALLEL PROCESSING ENVIRONMENT FOR E-HEALTHCARE APPLICATIONS", INTERNATIONAL JOURNAL OF FUTURE GENERATION COMMUNICATION AND NETWORKING, VOL. 13, NO. 4, PP. 4963-4969, FEBRUARY 2021, ISSN:2233-7857.

- ✚ SURESHA D , PROFESSOR , DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING PUBLISHED A EBOOK "CONFIDENCE ANALYSIS OF A SOLO SIGN-ON DEVICE FOR DISTRIBUTED COMPUTER NETWORKS: A MODELING APPROACH", RECENT ADVANCES IN MATHEMATICAL RESEARCH AND COMPUTER SCIENCE, VOL. 5, 2021, CHAPTER 9, PRINT ISBN: 978-93-5547-324-0, EBOOK ISBN: 978-93-5547-325-7, PAGE NO. 94-104. DOI: 10.9734/BPI/RAMRCS/V5/1548B.

- ✚ SURESHA D , PROFESSOR , DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING PARTICIPATED IN "QUANTUM INFORMATION SYSTEM AND MACHINE LEARNING", CONFERENCE @ DEPARTMENTS OF COMPUTER SCIENCE & ENGINEERING, INFORMATION SCIENCE & ENGINEERING AND MASTER OF COMPUTER APPLICATIONS AT RAMAIAH INSTITUTE OF TECHNOLOGY, BENGALURU, 23RD TO 27TH AUGUST 2021.

- ✚ MR. RAKESH M R, ASST. PROF. DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING PARTICIPATED IN A ONE-DAY WORKSHOP ON "AI APPLICATION DEVELOPMENT USING IBM CLOUD" @ DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, CHALAPATHI INSTITUTE OF ENGINEERING AND TECHNOLOGY IN COLLABORATION WITH IBM INDIA PRIVATE LIMITED , ON 9TH JUNE 2021.

- ✚ MR. RAKESH M R, ASST. PROF. DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING PARTICIPATED & COMPLETED SUCCESSFULLY AICTE TRAINING AND LEARNING (ATAL) ACADEMY ONLINE FDP ON "INTERNET OF THINGS (IOT)" @ JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING.

Campus Placed Students – Academic Year – 2020 -2021



Qspiders



Deepthi J

Qspiders



Kathijathul Sana

Qspiders



Rakshitha Shetty

Qspiders



Neha Rao

Qspiders



Fathima k

CLAY Tech



Nihad Abdulla

Campus Placed Students – Academic Year – 2020 -2021

Congratulations

FACE



Kathijathul Sana

Infosys



Apeksha Shetty

IBM India Pvt Ltd



Nikitha SA

Gramont



Deepthi J

QuickMetrix



Yajna J

QuickMetrix



Archana Rashmi

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



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