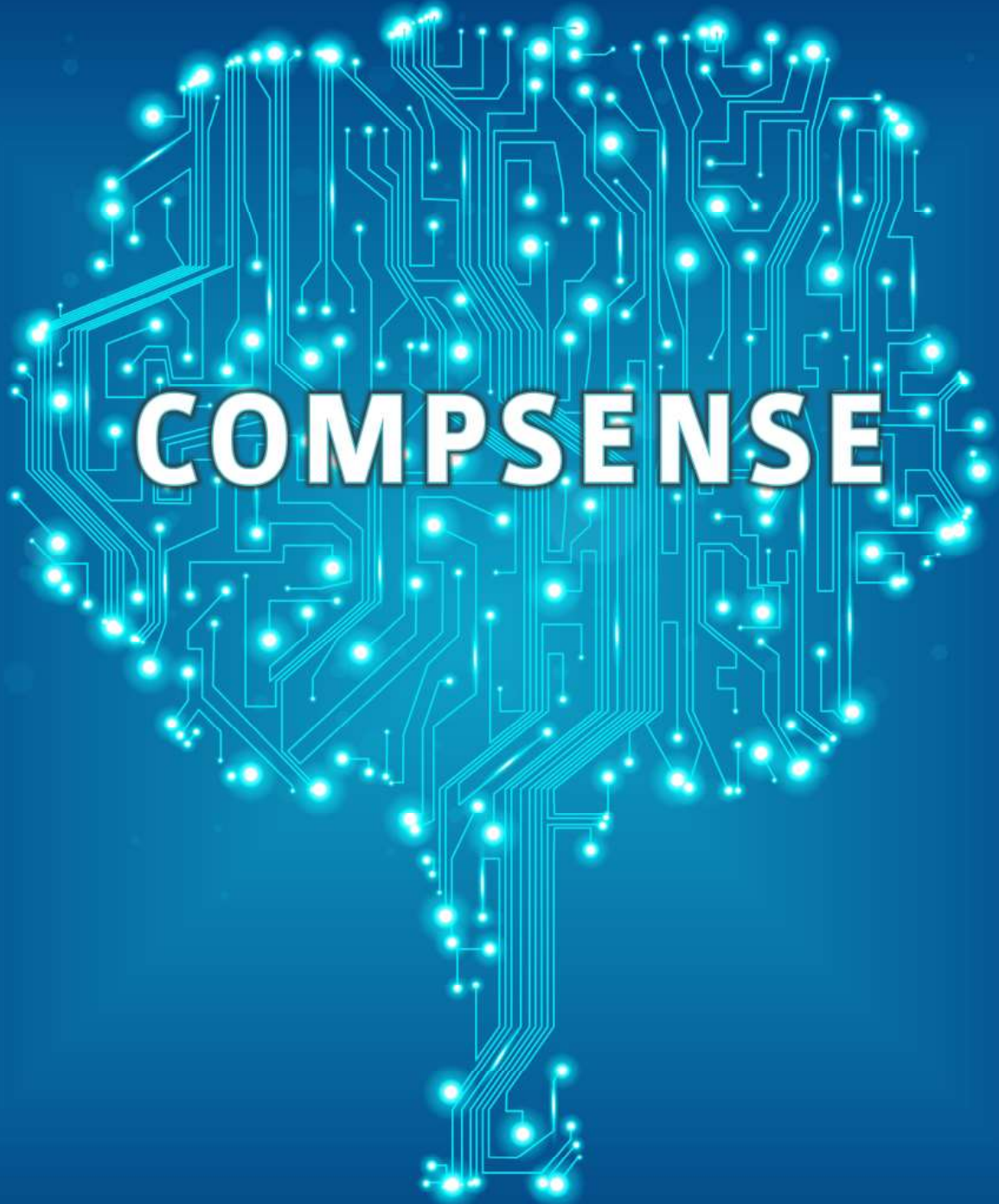


Department of
COMPUTER SCIENCE & ENGINEERING



ST JOSEPH ENGINEERING COLLEGE

(Affiliated to VTU, Belagavi and recognised by the AICTE, New Delhi. B.E. - CSE, ECE, EEE, ME Accredited by NBA, New Delhi)

VAMANJOOR, MANGALURU - 575 028, KARNATAKA, INDIA

Vision of the Department

To be recognized as a centre of excellence in computer and allied areas with quality learning and research environment.

Mission of the Department

- Prepare competent professionals in the field of computer and allied fields enriched with ethical values.
- Contribute to the Socio-economic development of the country by imparting quality education in computer and Information Technology.
- Enhance employability through skill development.



Director's Message



It gives me immense pleasure to pen a few words for our very own newsletter of the Computer Science Department, COMPSENSE which is very exclusively meant to identify, recognize and sharpen the talent and potential that the Department so plentifully has. The Computer Science and Engineering Department in our college has grown abundantly in the recent past. People reading this newsletter will surely see a glimpse of this tremendous change in this beautiful newsletter.

I sincerely appreciate and congratulate the editorial team and the entire department for their unrelenting efforts in compiling this newsletter. May the Lord pour his choicest blessings on all of you!

Rev. Fr Wilfred Prakash D'Souza
Director - SJEC

Assistant Director's Message

Congratulations to the Department of Computer Science for bringing out an informative Department Newsletter. I am sure that this Newsletter carries lot of innovative works and ideas and achievements of our students and faculty. The Department is very vibrant throughout the year with lot of activities which makes students not only better professionals but also responsible citizens. This booklet is a source of inspiration for the students to build on their ideas, creativity and imagination. Congratulations and all the best to the editorial board for this wonderful newsletter.



Rev. Fr Rohith D'Costa
Assistant Director - SJEC

Assistant Director's Message



Computer Science department is a very vibrant department in St Joseph Engineering College Vamanjoor. Every student looks forward to join this department in this computer era. News letter of the department is a unique initiative which is a showcase of the departmental activities. All these new initiatives are promoted just to improve internal quality of the department and also to form future creative engineers. I request all the students and faculty to grab each and every opportunities which are at your reach. Famous philosopher Heraclitus said "You cannot step into the same river twice." In the same way opportunities will never knock at our door multiple times. Once lost opportunity and time, it is lost forever. Covid 19 pandemic has brought disaster and made us to lose number of opportunities. But we should not lose our hope, 'Every Cloud has a Silver Lining'. Very soon we will return to the normal life and will have ample opportunities before us. I wish all the best for the editorial board for taking this great initiative and publishing this news letter. I wish all the success.

Rev. Fr Alwyn Richard D'Souza
Assistant Director - SJEC

Principal's Message

The brand name of an institution depends upon the caliber and achievements of the students and faculty members. The role of a teacher has now been transformed into that of a facilitator and a mentor who has to shoulder the responsibility of nurturing the skills and abilities of the students in academic, co-curricular and extracurricular domains. It is truly impressive to note that COMPSENSE – the newsletter of the Department of Computer Science and Engineering showcases the work of our students and the contribution of our faculty. It exemplifies the spirit of the student community, their enthusiasm and creativity. Hearty congratulations to the editorial team on assorting all of these into Compense



Dr Rio D'Souza
Principal, SJEC

HOD's Message



The department of CSE at SJEC currently hosts around 500 students enrolled in various programs and courses, including degrees in Bachelor of Engineering, MSC and PhD in Computer Science. The department is also recognized as a centre for research by VTU, Belagavi. With a holistic vision to be recognized as a centre of excellence in computer and allied areas with quality learning and research environment, the department comprises of 30 faculty and 10 technical & supporting staff who are passionate about educating and mentoring undergraduate and graduate students become successful professionals and next generation leaders in Research, Technology and Innovation, rooted with strong human values. The department has the unique distinction of holding a mass of active faculty who are IUCEE certified Engineering Educators, well-equipped to cater to the needs of millennial learners via active learning strategies, interactive classrooms, project-based learning techniques promoting critical thinking as well prepare them to solve real-world problems. The department since its inception has strived hard to create a welcoming environment for students with good teacher-student relationship, easily accessible faculty who are available beyond class contact hours and ready to collaborate with students in their project initiatives. The vibrant student association CIPHER and Delta-DevOps act at the forefront, where students under the guidance of faculty and staff come together in governing and organizing various activities of technical, cultural and societal importance at department, college and regional arena. While the department's focus is on overall development of students, some of the notable initiatives include outreach and societal integration activities in the fields of scientific, technical and educational expertise, engagement of students in periodic domain and placement centric Student Training Programmes to equip them with relevant hard and soft skills. The department holds close ties with faculty and researchers working in other universities, who collaborate as resource persons in various student and faculty-centred training programmes. The department has MoUs with emergent companies such as CISCO for CCNA certification, Blue Prism for internship and training on Robotics Process Automation, Kakunje Software Pvt Ltd for internship and real-time projects, Infosys Campus Connect for training and VMWare for preparing students in Cloud computing field. I congratulate the team of faculty members and students for their intense efforts in sculpting the CSE department as one of the best. I wish all the Students and Faculty a fruitful career.

Dr Sridevi Saralaya
Head - Department of Computer Science and Engineering - SJEC

Programme Educational Objectives (PEOs)

- To impart to students a sound foundation and ability to apply engineering fundamentals, mathematics, science and humanities necessary to formulate, analyze, design and implement engineering problems in the field of computer science.
- To develop in students the knowledge of fundamentals of computer science and engineering to work in various related fields such as network, data, web and system engineering.
- To develop in students the ability to work as a part of team through effective communication on multi-disciplinary projects.
- To train students to have successful careers in computer and information technology industry that meets the needs of society enriched with professional ethics.
- To develop in students the ability to pursue higher education and engage in research through continuous learning.

Programme Outcomes (POs)

- By the end of the undergraduate programme in CSE, graduates will be able to:
- Apply knowledge of mathematics, science, engineering fundamentals, computer science and engineering to solve complex engineering problems.
- Identify, formulate, research literature, and analyze complex engineering problems in reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 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 using research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 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.
- Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.
- Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 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, give and receive clear instructions.
- 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.
- Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Programme Specific Outcomes (PSOs)

- By the end of the undergraduate programme in CSE, graduates will be able to:
- Understand the principles underlying entrepreneurship, freelancing and the requirements to initiate a startup in the IT or related domains.
- Participate effectively in competitive examinations related to certification, career growth and admission to higher studies.

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Department Activities



Talk on “Developing a Methodology for Multidisciplinary Research”

The Research Committee in association with the Department of Computer science and Engineering organized a talk on “Developing a Methodology for Multidisciplinary Research” by Dr. Ashok Rao, Advisor and Research Professor VVCE, Mysuru, Former Head Network Project CEDT, IISc, from 9.30 am to 12.30 pm in Spoorthi Hall on 21st May 2019. Dr. Rachana P, Associate Professor, CSE welcomed the gathering and introduced the resource person to the audience. Dr. Sri-devi Saralaya, HOD of Computer Science and Engineering Department welcomed the resource person with a bouquet. The resource person touched the following topics in his talk:

- 1) What is Really Research and how Research can be done?
- 2) How Interdisciplinary Research can be done and what are the Components of Interdisciplinary Research (Using a case study in detail).

At the end of the session Dr Anjali Ganesh - Professor, MBA felicitated the resource persons with a memento. The event concluded with the vote of thanks delivered by Dr Rachana P, Associate Professor, Research Coordinator -CSE.

FDP on “MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning”

The Department of Computer Science and Engineering in association with SJEC-MATLAB, CSI-SJEC Student Chapter and Industry and Innovation Group (IIG) hosted the Faculty Development Programme on “MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning” on 10th to 12th February 2020 for all the interested faculty and research scholars from various colleges in the state. The FDP was coordinated by Ms Sunitha Guruprasad and Ms Chaithra of Computer Science & Engineering Department. The programme began with a formal Inaugural session on 10th February 2020. Ms Anusha M M, Asst Professor CSE Dept welcomed the guests, the resource person and the participants of the workshop. Dr Sridevi Saralaya, HOD of Computer Science and Engineering welcomed the guest Mr Rakshith B S, Senior Application Engineer, CoreEL Technologies, Bangalore with a bouquet of flower. The FDP session began with an introduction of Math works Products, MATLAB programming basics, numerical computation, data analysis and visualization, Resizing an image, Image Rotation, Translation of image, Converting color space of an image, Deblur images, Dehazing algorithm, Filtering/Denoising using guided filter and Smoothing: Average filter, Gaussian filter, Median filter, Edge preserving filters, Image sharpening. The second day includ-

ed the following topics:

Image thresholding, Adding noise into the image, Image noise reduction, Filtering image using Gaussian/Average filters. Morphological operations: Structuring elements, Erosion, Dilation Compound operations, Fill interior gaps, Smoothing of the objects, Annotating faces, Image registration, Estimate geometric transform, Reconstruction of images, Face detection using KLT Algorithm, Detection of interesting points over the face, Tracking the face. The third day of the FDP included the topics of Machine learning using MATLAB: Cleaning the data, EDA (Exploratory Data Analysis), Visualize using Scatter plot, Plot decision boundary, Train classifier, Occam’s Razor. Using classification learner app: Regression, RMSE, Export Model, improving predictive models, Training the models, Predictions, Confusion chart, Classification “ Deep learning tool box, Analysis, create image data store, augmented image data store to resize images, Transfer learning “ training networks At the end of the programme, HOD appreciated the resource person for their whole-hearted contribution towards the success of the workshop and presented them with a memento as a token of appreciation. Ms Anusha M M thanked all the participants for their active participation in the workshop.



Introductory Session on CISCO Certification Programme

The Department of Computer Science and Engineering hosted a two day CISCO Certification Introductory session on 9th and 10th August 2019 for all 3rd year students. The Introductory session was coordinated by CISCO department coordinators Ms Supreetha R & Ms Pramila M and technical staff Ms Nikitha under the assistance of HOD Dr Sridevi Saralaya. This Session aimed at familiarizing the students with the various certification programs under CISCO. The Introductory session received a good response from students. The programme began with a formal welcome session on 9th August 2019 at spoorthi hall AB III 7th Floor. Dr Sridevi Saralaya, HOD of Computer Science and Engineering welcomed the resource persons and the participants of the Training programme. The Resource Person Mr Pradeep, Corporate Trainer and Mr Neelesh Rai, Executive Trainer from Natella authorized CIS-

CO Trainers addressed the gathering and encouraged the gathered participants to make maximum use of this opportunity to enhance their knowledge on Networking. Students were divided into a group of 60 each where one batch of students had soft skills training by Mr Neelesh in webinar hall and another batch of students had Basic Introduction to networking components by Mr Pradeep in IOT lab where he also briefed them the procedures of taking online certification exam and importance of undergoing this training programme. On the second day student batches were swapped and the sessions continued by their respective batch trainers.

This two day introductory session was appreciated by all the participants who were happy to have received such valuable information from enthusiastic CISCO Trainers. At the end of the programme, the HOD appreciated Mr Pradeep Corporate Trainer and Mr Neelesh Rai Executive Trainer for this whole-hearted contribution towards the session



Faculty Development Programme on Microcontrollers and Embedded Systems



The Department of Computer Science and Engineering hosted the Faculty Development Programme on Microcontrollers and Embedded Systems from 27th to 29th January 2020 for all interested faculty and research scholars. The FDP was coordinated by a team of faculty and technical staff coordinated by Dr Sridevi Saralaya. This FDP aimed at familiarizing the faculty with the ARM controller kit. There were a total of 6 participants from neighboring colleges and 26 internal participants. Ms Anusha M M, Assistant Professor, Dept of Computer Science and Engineering welcomed the resource person and the participants of the workshop. The FDP morning session began with the technical talk on Microprocessor and Microcontrollers by Dr B Venkatesa Perumal. He gave an introduction to microcontrollers and also introduced the faculty to some basic programming syntax of ARM controllers. At the end of the session the speaker was thanked for the vast information shared and Ms Eden, Assistant Professor, CSE dept, presented the speaker a memento as a token of gratitude. The afternoon session began with the technical talk on Embedded Systems by Dr K Chandrasekaran. He gave an in-

roduction to basics of embedded systems and its architecture. He also gave insight on content beyond syllabus of every module of embedded system that can be incorporated by the faculty. At the end of the session Dr Sridevi Saralaya, HOD, CSE dept., presented the speaker a memento as a token of gratitude. On the second day, faculty were introduced to the programming on ARM controllers kit by Mr Harish Nadig. He explained various hardware related programs that can be executed on the ARM controller kit. The third day of the FDP included hands-on session on running the various software programs that were used to connect the hardware components to the ARM controller kit. He also introduced the faculty to the simulation software viz. KEIL to do the simulations of the microcontroller. This three day FDP was appreciated by all the participants who were happy to have received such valuable information from an enthusiastic Microcontroller and Embedded System specialists. At the end of the programme, the HOD appreciated Mr Harish Nadig for his whole-hearted contribution towards the success of the workshop and presented him with a memento as a token of appreciation. The training programme ended with the distribution of certificates to all the participants.

Project Exhibition

Project Exhibition cum Competition of final year projects was conducted from 23rd June to 26th June 2020. Final year students demonstrated their projects online using Google Meet to third year students.

Webinar on “How to carry out research projects?”

A webinar on “How to carry out research projects?” was organized on 22nd June 2020 for students and faculty of SJEC. Mr. Ashwin T, Associate Professor, CSE Department was the resource person for the webinar. About 94 participants attended the webinar. The webinar gave an insight into the areas of research, how to choose research topics for project, and how to carry them out.

Webinar on “NLP – Basics, Generic & Health care Applications, Chatbots and a Demo Application”

A webinar on “NLP – Basics, Generic & Health care Applications, Chatbots and a Demo Application” was organized on 27th June 2020 for students and faculty of CSE. Mr. Rithesh S, Research Scientist at Philips India was the resource person for the webinar.



Department Association Activities

- CIPHER *CIPHER Inaugural*

An informal Inaugural of CIPHER student association to welcome second-year students to the Department was organized on 1st October 2019 from 12:00 pm - 5:00 pm in the Kalam Auditorium. The event began with a welcome speech by Dr. Sridevi Saralaya, HOD, CSE. This was followed by the distribution of prizes to the academic achievers. Lunch was arranged for all students, faculty, and staff of the department of CSE. The post-lunch session included several spot games for students and faculty of CSE.





Workshop on LaTeX

A workshop on LaTeX was organized by the Cipher Association on August 31, 2019, at St. Joseph Engineering College, Vamanjoor. A total of 132 students of 5th semester, CSE attended this workshop.

The resource persons for the workshop were Ms. Chaitra and Ms. Sona Mundody, Assistant Professors, Department of CSE, SJEC. The session started with Ms. Chaitra and Ms. Sona guiding the students about overleaf an online LaTeX editor and already installed a document preparation system. Instructions were given to create a report for the project. Students were given the knowledge of how to create the front page, insert heading, sub-headings, and insert images. A brief explanation was given about how to insert equations and to create a simple table, combining rows and columns and about captions, labels, and references. Further explanation was given to create a cover page, add page numbers

and templates. The hands-on session helped the students to get a better understanding of LaTeX. The students interactively participated in the workshop. The overall aim of providing knowledge of Document typesetting using LaTeX to the students was accomplished



Intra-Departmental fest Aurora-2019

CIPHER hosted an Intra-Departmental fest 'AURORA-2019' on 26th October 2019. The fest comprised of a technical, semi-technical, and a non-technical event each. The technical event Lights Out was a blind coding event. Participants had to form a group of 3 members for the event. The first place was bagged by Mr G Sunil

and Mr Calvin Dsouza of third year. The second place was won by Mr Raksharaj Shetty, Mr Novin Misquith and Ms Laureen Maria Fernandes of third year. The semi-technical event Enigma had three rounds in it. Round 1: 13 reasons why, Round 2: Gold Rush, and Round 3: Hunt for the prize. The first place in this event was won

by Mr Keith Monteiro, Mr Aaron Lobo, Mr Jenol Pinto and Mr Denson Dsouza of second year and the second place was won by Ms Andrea May Fernandes, Mr Jayasurya, Mr Mohammed Ashir and Mr Mohammed Jasim of third year. The non-technical event Counter Strike had teams of 5 members each. The first place in this event was bagged by Mr . Gavin Wil-



son, Mr ,Naxatra, Mr Nireekshith, Mr. Wenzel Audrin Barboza, and Mr Shaun Stephen D'Souza of second year and the second place was won by Mr Karthik Gowda, Mr Job Alexander, Mr Manish, Mr Shashank Reddy and Mr Colin Fernandes of fourth year. The winners received certificates and gift vouchers that were sponsored by the college.



Session on "Introduction to GIT and GITHUB"

A session on 'Introduction to GIT' was organised by Cipher - Student Association - CSE on 10th March 2020 in the CSE webinar Hall from 11:00am to 1:00pm. A total of 88 students of 8th semester CSE attended this session. The resource person for this session was Mr Rohan Don Salins, Assistant Professor, Department of CSE, SJEC. The objective of this workshop was to provide students with the basic knowledge of the features of GIT. Mr Rohan Salins explained the creation of a web application using modern web development tools such as Bootstrap, AJAX, and jquery and then gave a demonstration of version control of a typical web application with GIT using the PHPStorm IDE. Mr Rohan Salins also gave a brief introduction to Github and its applications. Ms Spurthy Pais, Faculty Coordinator of Ci-

pher, presented memento to the resource person for the session. The session was concluded by Ms Spurthy Pais by thanking the resource person and the attendees of the session.



Department Association Activities

- CSI Chapter

Talk on "Start a start-up - Become an Entrepreneur"

The CSI-SJEC Student Chapter in association with the Industry and Innovation Group (IIG) organized a talk on "Start a start-up - Become an Entrepreneur" on 26th October 2019 from 11:00 am to 1:00 pm in Webinar Hall. The Resource Person for the talk was Mr Gopalakrishna Bhat Kakunje, Managing Director of Kakunje Software Private Ltd, Mangaluru. The Talk was organized for the 7th semester CSE students. The programme was con-

ducted to give the students an insight into entrepreneurship and its challenges. Mr Aronstun, student of 5th semester CSE was the Master of Ceremony of the function and he warmly welcomed the gathering. Mr Gopalakrishna Bhat then opened his session with the perks of being an entrepreneur and also mentioned that one should not restrict themselves to a particular discipline and embrace innovation. He explained the foundation for a start-up and the various schemes provided by the government to encourage young entrepreneurs. He stressed on the role of accelerators and incubation centres and the kind of start-up ecosystems they provide. He then went on to discuss his own entrepreneurship journey and the various challenges that he faced, the major ones being Account and Employee management. He also spoke about Licenses, patents and copyrights. He concluded his session

stating that one should focus on customer satisfaction and quality and also added that courage and willingness to do everything and anything are the two most important qualities of a successful entrepreneur. On the whole, the session was informative and insightful and gave the students a peek into transforming their ideas into a business. The vote of thanks was proposed by Mr Aldrin, student of 7th semester CSE. The session concluded at 1:00 pm and around 120 students attended the talk. The programme was coordinated by Ms Sunitha Guruprasad, Assistant Professor in the Department of CSE and staff Coordinator of CSI-SJEC Chapter. The Office bearers and members of CSI provided all the help required to conduct the session successfully. As a token of appreciation, Mr Gopalakrishna Bhat Kakunje was felicitated with a college memento.



Workshop on Digital Image Processing and Applications

The CSI-SJEC Student Chapter conducted a two day workshop on “Digital Image Processing and applications” on 28th and 29th February, 2020, in the Webinar Hall of CSE department. The workshop was open for the interested students of BE-CSE. The resource persons were Dr P C Siddalingaswamy and Dr Narendra VG, Associate Professors-Senior (CSE), from MIT, Manipal. The inauguration of workshop was compered by Ms Rachel Gwynath Mendonsa, office bearer of CSI. The HOD of the Department of CSE, Dr Sridevi Saralaya welcomed the resource persons, Dr P. C. Siddalingaswamy and Dr Narendra V G with flowers. Dr P. C. Siddalingaswamy started the session with a brief introduction to Digital Image processing (DIP). He also elaborated on the applications of Image processing concepts in

various fields. Difference between Computer Vision and Digital Image processing was discussed. The second session was about Augmented / Virtual Reality, Medical Imaging, Image registration, Image Enhancement and Image Segmentation methods. A brief introduction on the various softwares that can be used for implementing the DIP projects were given to the students. The afternoon session was a Hands-on session, where the students were taught about the applications of DIP using MATLAB by Dr Narendra V G. A Miniproject was given to the students based on the day's learning. The next day's session covered the topics of real time applications that can be created using Image processing tools. Case studies on application of Image Processing to Medical diagnosis and application of Image

Processing to Food processing were explained in detail. A Miniproject was given to the students based on the day's learning. Students asked many doubts and clarified it. Students got a useful demo and also a hands-on experience on MATLAB and DIP. On the whole the session was interactive and helpful to students. Ms Sunitha Guruprasad, Coordinator of CSI-SJEC Chapter, presented mementos to the resource persons for their efforts. The session was concluded by thanking everyone by Mr Leroy Dsilva, Vice-President of CSI. A total of 55 students from sixth semester CSE, participated in the workshop. Ms Sunitha Guruprasad, staff coordinator of CSI-SJEC Student Chapter and the Office bearers of CSI coordinated the workshop.



Industrial Visit to Infosys, Mudipu

Department of Computer Science Engineering in association with CSI-SJEC Student Chapter, Industry and Innovation Group (IIG) and Infosys Campus Connect, organized an industrial visit to the campus of Infosys at Mudipu, Mangaluru on 3rd March 2020 for the sixth semester students of CSE department. A total of 98 students participated in the industrial tour. Ms Supreetha R – SPOC-Infosys Campus Connect and Ms Chaitra, Assistant Professor, Department of CSE, accompanied the students. Ms Sunitha Guruprasad, staff coordinator of CSI-SJEC Student Chapter coordinated the visit. After an hour long commute to the campus, the person in-charge, Ms Swathi Jogi, Senior Member - Education, at Infosys Limited, welcomed the students and the faculty. Students were made to gather in an auditorium and given a brief introduction about

the company which involved overview about the wide range of products as well as services, work culture and CSR activities carried out by Infosys. This was followed by a brief power point presentation about the path traversed by Infosys. The first technical session was covered by Ms Thanuja Rao from education and training department. She gave introduction about infyTQ and developing global delivery model. Mr Susheel, IT trends project manager of block chain department, spoke about current IT trends. He elaborated on transition from college campus to the corporate life and briefed about the recent and popular trends in IT industry. He also stressed upon the importance of communication skill, thinking out of the box, willingness to learn and adopt new technologies and working in teams by sharing ideas. He also gave information about block chain and Quantum computers. Mr Madhukar Nayak, spoke about Machine

learning, AI and Data Analytics. She said that these are current trends in IT field and they would help a lot to the students in future. Students were given an opportunity to put forward their queries and get information about how the industry works. The sessions were both informative and entertaining and the students learnt a great deal about how the industry works. This was followed by a campus tour where the Training Center, meeting rooms and other benefits offered to the employees were shown. The industrial visit gave all the students an insight about the working of the industry. It also gave them an idea about the work environment of the employees and the various facilities available. The visit was a memorable and encouraging experience for the students.



Session on Database Application Development

The CSI-SJEC Chapter conducted a hands-on session on "Database Application Development" using Java language for 5th semester CSE students on 24th August 2019 from 9:10 am to 1.00 pm in the Webinar hall of the CSE department, Academic block-III. The session was welcomed by Ms Sunitha Guruprasad, Coordinator of CSI-SJEC Chapter. Ms. Pramila R M, Assistant Professor, Department of CSE was the resource person. She briefed the students with Initial installation procedure of the JDBC driver. She also explained the procedure of creating a Web Page effectively using Netbeans IDE. The procedure to create different front end and web components was explained. Further the core part of the web application, to create Back-End Database was explained using Oracle 11g software. Finally the code to connect JDBC to Database was explained and connection between J2EE component and Data

Base was established by all the students. All students asked many of their doubts and clarified it. Students got a useful demo and also a hands-on experience on JDBC connection which is important to develop a web application. On the whole the session was interactive and the session was helpful one. The session was concluded by thanking everyone by Ms Sunitha Guruprasad, Staff Coordinator of CSI.



Database Application Project Display

The demonstration of the DBMS Projects from the final year students for the third-year students was held on 8th of October 2019, under the banner of CSI-SJEC Chapter. The main aim of the session was to give a brief idea of the database projects by presenting the projects that were done by the final year students and help the third-years to make their own projects. The session started by taking the pre-session feedback from the audience to know the level of knowledge they hold on the database projects. Then Ms. Crystal Dsouza, the President of CSI-SJEC branch spoke about the importance of this project in terms of placements. The final year students had done beautiful and creative projects that inspired the third-years to make their projects enthusiastically. The projects demonstrated are:

1. Travel Management System: A database project using Java swings, for booking transport tickets and hotel rooms, presented by Niah Saniah of final year CS.
2. Time Table Management Application: A database project using Javafx, for teachers and students to keep track of the classes and attendances of particular semester, presented by Tejas of final year CS.
3. Billing Application for Clinics: A database project using Javafx, for the clinics to prepare the bill from the inbuilt price of the medicines, presented by Tejas of final year CS.
4. Online Food Delivery System: A database project using Javafx, for food ordering and delivering from a restaurant. It has a separate application system for customer, employee of the restaurant and the owner of the restaurant, which are interconnected,

presented by Winston Dsouza of final year CS.

5. Company Management System: A database application using C#, for managing projects and meetings in It companies, presented by Shreema of final year CS.
6. Franchise Database System: A database application using Javafx, for entering and referring the phone numbers and addresses in the phone directory, presented by Jalaj and Adnan of final year CS.

The post-session feedback was taken to know how this session helped the third-years students in making their own database project. Ms Sunitha Guruprasad, the student coordinator for CSI-SJEC Chapter proposed the vote of thanks and the session was concluded. The Office bearers and members of CSI provided all the help required to conduct the session successfully.



Department Association Activities

- Delta DevOps

Session by Delta DevOps for first year students

As a part of the Department Specific session of the Induction programme for first year CSE students, the members of Delta DevOps – a new student club of department of Computer Science and Engineering briefed the first years about the various activities and sessions conducted by the club. Ms Shreema Simran and Ms Nasil Saniyah provided information on the member recruitment process of the club and the necessary skills and qualifications required to be a member. A demo of various projects developed by the club was done to give a clear picture of the ongoing activities of the club. Useful information about opportunities available on online platforms such as Hackerank, HackerEarth, etc was also discussed during this session. Students were introduced to LinkedIn and were taught about how to build a professional profile.



Placement Training Session for 3rd year students by Delta DevOps



Representatives of the CSE Student Club Delta DevOps have actively engaged themselves in training the 3rd year students for the upcoming placements. The first session of this training was conducted on 11/03/2020. Students were briefed about the Interview and Recruitment process for various companies. A discussion about expected skills for job profiles such as Software Engineers/Developers, Support Engineer, DevOps Engineer, etc was conducted. Placement Drive experience of different companies was shared

by 4th year students. Q&A session was conducted where questions related to placements and extra skills required for placement was discussed. Resume formatting and write-up was also discussed.

Department Association Activities

-IEEE Computer Society

The Computer Society Chapter, IEEE SJEC Student branch organised a hands-on workshop on 'Machine Learning and its Applications' by Mr. Mohammed Ameer, founder of Diazonic Labs, Bengaluru - a leading educational company which delivers workshops on various upcoming technologies. The workshop was conducted for three days from 10th February, 2020 to 12th February, 2020. The session was aimed at helping the final year students achieve a deeper and application level understanding in Machine Learning. The session involved pre-processing, choosing the right algorithm based on each problem statement, model fitting, how over fitting can be avoided, image processing and mini project. Ms Pramila M, Assistant Professor, Department of Computer Science and Engineering, welcomed the students to the workshop and introduced Mr Mohammed Ameer who was the trainer for the workshop. Day 1 was a theory and an introductory session on python and various python libraries used for Machine learning. In the morning session the trainer explained the theoretical aspects of Machine Learning and how it is different from the usual method of processing the data. The afternoon session involved working with Numpy, Matplotlib and Pandas libraries. The session ended with the trainer giving brief introduction on Machine learning model and the 9 essential steps to design any model. Day 2 focussed on how various types of data have to be pre-processed and converted into Data Frame. This involved Web Scraping of statistics of a batsman to derive insights on the batsman's overall

performance. Scikit Learn libraries were used to build the regressors and classifiers. Linear Regression, Decision tree, Support Vector Machine, K-Nearest Neighbours were some of the algorithms whose working and application was taught using the various use cases given by the trainer. Day 3 involved working with images and video datasets. First half of the day was devoted to learning the various functions in the OpenCV library which was used to process the image and creating a model from image and video dataset. Latter half involved a mini project where a face recognition application was developed and deploying OCR by Google tesseract on Web by using the Flask framework. Half an hour was allotted for a Q&A session where students clarified doubts and issues related to their final year projects. The workshop ended with the trainer giving tips on getting better skills and how networking was beneficial for fresher's in the industry.



Code Runner 2.0 and Mind Hunters

The Computer Society Chapter, IEEE SJEC Student branch organised two coding events: CodeRunner 2.0 and MindHunters for the students of CSE Department on 26th September, 2019. The event was co-ordinated by Ms. Pramila R M, Assistant Professor, CSE Department along with student representatives of IEEE Computer Society.

Code Runner 2.0:

This coding event had 3 questions of varying difficulty levels. Questions were based on mathematical puzzles and data structures. The contest was hosted on Hackerrank which programming platform which allows colleges to host private contests. Hackerrank gave participants the freedom to code in any language of their choice. Participants were allowed to use online resources to come up with a solution for the given questions. The time limit to solve the questions was 2 hours 30 minutes. Each question had 10 testcases that had to be cleared in order to get complete score of 100. The total score was 300. Two testcases were made public in order to help participants understand the nature of input and output. First place was won by Glen Lobo, Joel Miranda, Anurag D Shetty of 4th Year, CSE. Second place was won by Wilton Santhosh Dsouza, Shane Christopher Misquith, Winston Sebastian Pais, of 3rd Year, CSE



Mind Hunters:

The activity had a total of three rounds:-
 Riddler's Den: Participants had to solve 10 riddles.

Word Mania: Qualified participants had to fill out a cross-word from a set of questions given.

Tech Hunt: This round is a semi-technical treasure hunt. The first two teams who finishes this round takes the prize.

It consists of 3 sub-rounds:-

Debugging

Game (Tower of Hanoi)

Googling Answers

The event was conducted to make participants think outside the box with the riddles, Critical thinking (Tower of Hanoi) and experience the basics of programming.

The event had two prizes the first place was given a cash prize of Rs 1800 and second place was given Rs 1200.

First Place was won by Evanka D'souza, Ashwin D'souza, Amoga Vigram P of 2nd Year, CSE

Second Place was won by Alister, Krithi, of 3rd Year, CSE



Department Association Activities

-IEI

One-day hands-on workshop on Web Scraping with Python

The IEI association of the Department of Computer Science and Engineering organized a one-day hands-on workshop on 'Web Scraping with Python' for the III year CSE students on 21.09.2019 from 9.00 a.m. to 5.00 p.m. in the IoT lab (Room no.3607), Academic Block-III. The workshop began with Ms Anusha M M, Assistant Professor in the Department of CSE, Chairperson & CSE Department Coordinator for IEI welcoming the gathering and introducing the resource persons Mr Karthik Bhat, Mr John Fernandes, Mr Jason Misquith, Mr Jovel Cardoso, Mr Jaison Castelino from Unicourt India, Mangalore. The session began with Mr Karthik Bhat introducing the students to the basics of Python programming language, operations with

files, the datatypes and data structures required for web scraping. The students were exposed to a hands-on experience on scraping data from websites with BS4 package and getting all the data from websites in appropriate format. Students were divided into teams and given problem statements to work on with Mr Karthik Bhat's team members facilitating student learning. Dr Sridevi Saralaya, Head of the Department of CSE felicitated the resource persons of the workshop. The session ended with Ms Anusha M M proposing the vote of thanks. The organizing team consisted of chairperson, Ms Anusha M M and co-chairperson, Ms Supriya Salian, Assistant Professors in the Department of CSE.



Talk on 'Preparation for Higher Studies' by T.I.M.E. Pvt. Ltd, Mangaluru

The IEI association of the Department of Computer Science and Engineering organized a talk on 'Preparation for Higher Studies' for the III year CSE students by T.I.M.E. Pvt. Ltd, Mangaluru on 24.09.2019 from 4.00 p.m. to 5.00 p.m. in the Webinar Hall, 6th floor, Academic Block-III.

The talk began with Ms Anusha M M, Assistant Professor in the Department of CSE, Chairperson & CSE Department Coordinator for IEI welcoming the gathering. Mr Ashwith Poojary of T.I.M.E. Pvt. Ltd, Mangaluru interacted with the students about the opportunities that lie ahead after engineering education. He guided the students about the preparation required for higher studies and the qualifying examinations that are an admissions requirement for post-

graduate degrees.

The session ended with Ms Anusha M M proposing the vote of thanks



FDPs & Workshops Attended

Name of the Faculty	Organized by	Title of the professional development programme	Date and Duration (from - to)
Dr Sridevi Saralaya	NITK - STEP	Python and its Applications	Feb 3-7, 2020
	NMAMIT, NITTE	Applied Machine Learning using Python	June 9-12, 2020
Dr Kavitha Mahesh	IBM & Mangalore University	Introduction to Business Analytics	July 22-24, 2019
	IBM & Mangalore University	Business Intelligence	July 25-27, 2019
	NITK Surathkal	One Week National Workshop on High Performance Computing (HPCA 2019)	Aug 12-17, 2019
	SJEC Mangaluru	MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Feb 10-12, 2020
	NMAM Institute of Technology, NITTE	Applied Machine Learning using Python	June 9-12, 2020
Dr Usha Divakarla	St Aloysius Institute of Management and Information Technology, Mangalore.	Webinar on Future of Computing-Cloud and Fog Computing	June 19, 2020

Name of the Faculty	Organized by	Title of the professional development programme	Date and Duration (from - to)
	Chennai Institute of Technology, Chennai	one week FDP on Emerging Technology Trends in 4th Industrial Revolution World	June 22-26, 2020
Dr Ashwin TS	SJEC Mangaluru	FDP on Microcontrollers and Embedded Systems	Feb 10-12, 2019
	NITK Surathkal	One Week National Workshop on High Performance Computing (HPCA 2019)	Aug 12-17, 2019
	NITK Surathkal	Five-day workshop on "Artificial Intelligence and Machine Learning Applications in the Emerging Areas of Computer Science and Information Technology"	Dec 9-13, 2019
	SJEC Mangaluru	MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Feb 10-12, 2020
	NITTR, Kolkata	Rural Development Through Technical Institution (ICT08)	July 29 - Aug 2, 2019
Mr. Shreenath Acharya	SJEC Mangaluru	MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Feb 10-12, 2020
	IUCEE	IUCEE Annual Leadership Summit	July 10-12, 2020
	Chalapathy Institute of Engg & Technology	National workshop on AI/ML	July 13-18, 2020
	SJEC Mangaluru	Workshop on Deep Learning	Sep 3, 2019
Ms Sunitha G	SJEC Mangaluru	Workshop on Scopus & Mendeley: Tools for Empowering Research"	Sep 21, 2019

Name of the Faculty	Organized by	Title of the professional development programme	Date and Duration (from - to)
	SJEC Mangaluru	FDP on Microcontrollers and Embedded Systems	Feb 10-12, 2019
	SJEC Mangaluru	FDP on MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Jan 27-29, 2020
	Gopalan College of Engineering and Management, Bangalore	Two weeks FDP on LATEX	April 17-30, 2020
	SJEC Vamanjoor	Three day faculty development program titled "MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Feb 10 - 12, 2020
Ms Smitha V George	Finland Labs (A Unit of Revert Technology Pvt. Ltd.) In Association with NSS - IIT Roorkee	2 Days Instructor Led Live Online Workshop On ML & AI Using Covid-19 Virus Data Analysis	April 27 - 28, 2020
	NMAM Institute of Technology, Nitte	Faculty Development Programme on "Networks and Security"	May 26 - 29, 2020
	NMAM Institute of Technology, Nitte.	Four-Day Online FDP on "Applied Machine Learning Using Python"	June 9 - 12, 2020
	KSTA, Department of Science and Technplogy, Govt of Karnataka	4 Days Live Webinar on "Research Methodology and Data Analysis"	June 17 - 20, 2020
	St Aloysius Institute of Management and Information Technology, Mangalore.	Webinar on Future of Computing-Cloud and Fog Computing	June 19, 2020

Name of the Faculty	Organized by	Title of the professional development programme	Date and Duration (from - to)
	SJEC Mangaluru	FDP on Microcontrollers and Embedded Systems	Feb 10-12, 2019
Ms Supriya Salian	IBM and Mangalore University	Introduction to Business Analytics	July 22-24, 2019
	IBM and Mangalore University	Business Intelligence	July 25-27, 2019
	SJEC Mangaluru	FDP on MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Jan 27-29, 2020
	Alva's Institute of technology	FDP on AI	May 22-26, 2020
	NMAM Institute of Technology, Nitte.	Four-Day Online FDP on "Applied Machine Learning Using Python"	June 9 - 12, 2020
	KSTA, Department of Science and Technplogy, Govt of Karnataka	4 Days Live Webinar on "Research Methodology and Data Analysis"	June 17-20, 2020
	TEQIP PHASE-III	Five day Short-Term Program on "Applications of Data Mining and Deep Learning Techniques in Multidisciplinary Area"	June 24-28, 2019
Ms Gayana M N	NITK, Surathkal	"7 Days FDP on Student Induction Program"	June 18-24, 2019
Ms Supreetha R	AICTE sponsored workshop at Sahyadri Institute of Engineering and Management	Aug - Nov 2019	IUCEE
	IIEECP Phase II		
	BMSIT&M, Bengaluru	Data Analytics-A Practical Approach	Jan 27-31, 2020

Name of the Faculty	Organized by	Title of the professional development programme	Date and Duration (from - to)
	SJEC Vamanjoor	Three day faculty development program titled "MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Feb 10 - 12, 2020
	SRM Institute of Science and Technology, Chennai	Emerging Research Areas in Engineering	June 5-9, 2020
	KSTA, Department of Science and Technplogy, Govt of Karnataka	4 Days Live Webinar on "Research Methodology and Data Analysis"	June 17- 20, 2020
Ms Renuka Tantry	SJEC Vamanjoor	IIEECP Phase I Workshop	August 5-7, 2019
	Yenepoya Institute of Technology, Moodbidri	Five day faculty development program on "Cyber Security and Blockchain Technology"	Jan 20-24, 2020
	SJEC Vamanjoor	Three day faculty development program titled "MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Feb 10-12, 2020
	NMAM Institute of Technology, Nitte.	Four-Day Online FDP on "Applied Machine Learning Using Python"	June 9 - 12 2020.
	KSTA, Department of Science and Technplogy, Govt of Karnataka	4 Days Live Webinar on "Research Methodology and Data Analysis"	June 17-20, 2020.
Ms Evita Coelho	SJEC Mangaluru	FDP on Microcontrollers and Embedded Systems	Feb 10-12, 2019

Name of the Faculty	Organized by	Title of the professional development programme	Date and Duration (from - to)
	SJEC Mangaluru	FDP on MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning	Jan 27-29, 2020
Mr Gerald Fernandes	SJEC Mangaluru	FDP on Microcontrollers and Embedded Systems	Feb 10-12, 2019
	KSTA, Department of Science and Technology, Govt of Karnataka	4 Days Live Webinar on "Research Methodology and Data Analysis"	June 17-20, 2020
Ms Anusha M M	SJEC Vamanjoor	Three-day faculty development program titled "MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning"	Feb 10-12, 2020
Ms. Sona Mundy	IIM, Bengaluru	3 days of virtual workshop on "Machine Learning using Python"	June 26-28, 2020
Ms. Chaithra	SJEC, Vamanjoor	Three-day faculty development program titled "MATLAB and its applications in the areas of Image Processing, Computer Vision and Deep Learning"	Feb 10 - 12, 2020
	JSS ACADEMY OF TECHNICAL EDUCATION, NOIDA Department of Electrical and Electronics Engineering	Three-day online FDP on "Combatting COVID-19 Pandemic with AI and Robotics: Innovative Indian Startups"	June 8-10, 2020
	KSTA, Department of Science and Technology, Govt of Karnataka	4 Days Live Webinar on "Research Methodology and Data Analysis"	June 17-20, 2020
	IIM, Bangalore	Three day online FDP on Deep Learning.	June 26-28, 2020

Technical Articles

Eye in the Sky

Princy Paul D'silva, S B Shubha, Rachel Pinto, Sushan Suresh Sapaliga, and Vijetha U

The project "Eye in the sky" aims to develop a self-flying drone equipped with a camera that tracks and follows a user at a safe distance. It can be useful in journalism where news reporters may have to film footages on unsafe terrains/conditions. The user to be filmed by the camera has to register himself with the device and then the drone automatically tracks the registered user and films him while also maintaining a safe distance. The major tasks to be accomplished by the project involves (i) identifying the user in the captured footage, (ii) automating the movement of the drone to follow the user, (iii) ensuring safe distance from the user. The camera equipped on the drone will be capturing video. Image processing will be done on the captured footage to identify the user in the captured frame. After the processing has been done, it will determine how much vertically and horizontally the drone must move to follow the user, while also ensuring a safe distance from the subject. The drone should also ensure safe distance from any other obstacles (people, animals, birds and inanimate objects as well)

It detects the face or the body of the target and receives the instructions in the form of gestures and from the mobile application in the form of button click. The device could also be customized for surveillance and made to follow a pre-defined path instead of following a subject. Once the drone is activated, the camera on the drone starts sending the feed to the computational device (laptop) through the common network created by the Wi-Fi module. The feed is received by the laptop, the function begins and it starts searching for its target. The function starts to guess the gesture made by the target. The gesture is used to command the drone to take off or land, start or stop recording, capture images and many more. It also maintains a battery check and makes sure that the drone is at a safe distance from the target. Once the instructions are received in the form of gesture, then these instructions are sent back to the drone as a command for its movement and the drone acts accordingly.

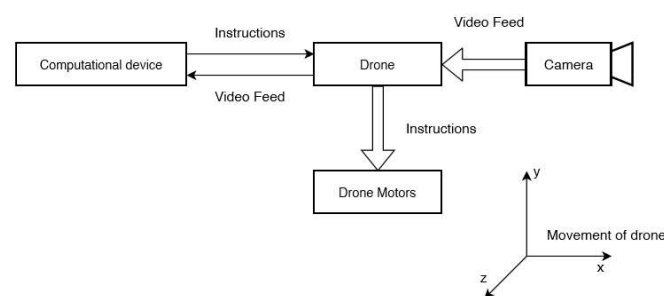


Figure 1 Architecture Diagram

The major tasks involved in the project are face detection, body and gesture detection, mobile application, drone control, play sound and maintaining safe distance. **Face Detection:** The drone detects the face of target by detecting the face focus points using the library (open pose).

Body and Gesture Detection: In body and gesture detection, the body key points are found after which the different gestures are made by the target and is detected. The gestures instruct the drone to perform different activities like start or stop recording, capture images, take

off or land the drone and many more. Mobile application: It is used for the communication with drone via Wi-Fi which acts as the remote for controlling the drone operations. Drone Control: Drone Command: A package named Tellopy is used where we can control the drone. Morse code: This is used to instruct the drone to take off. Play sound: This is used to play sound if drone is taking off or landing or if some gesture is detected.

Conversion of handwritten mathematical expression into LaTeX

A Navya, Ashwini K, Elrica Neha Costa, Lyvia Greema Pereira, and Chaithra Amin

LaTeX is a document preparation system for producing professional-looking documents. LaTeX is widely preferred by students, authors, mathematicians, and professionals for preparing applications, articles, reports, publications, thesis, books, or anything of that kind which includes complex mathematical expression. Although some basic mathematical symbols (+ - = ! / () [] :) can be accessed directly from the keyboard, most of them must be inserted using a command in LaTeX, memorizing which can be tedious. Writing formulas and equations for some publications or websites is a time-consuming task. Usually, there is LaTeX syntax used to enter formulas. But when formulas get more complex it gets really hard to remember all shortcuts and it is easy to lose end in a long line. To overcome the problems listed we are proposing an application to quickly and accurately convert handwritten mathematical expressions into LaTeX by just uploading the picture of handwritten mathematical expression. This application uses machine learning algorithms to detect the handwritten mathematical expressions which will be converted to their LaTeX counterparts. The input of our system is a trace of a handwritten expression. We use a CNN for feature extraction and classification. The output is the LaTeX representation of the expression.

Methodology

Hardware Used

SafeDistance: The drone also maintains a safe distance with the target to avoid the crash. There have been many incidents when cameramen have been injured/killed while filming in unsafe locations such as forest fires, landslides, war, wildlife, etc. An autonomous drone that does this work is an attempt to prevent such mishap

- *Laptop/Personal Computer Processor:* 1 gigahertz (GHz) or faster
- 64-bit (x64) processor
- *RAM:* 8GB or above
- Graphics Card
- Android phone

Software Used

- *Operating System:* Windows 7 (32-bit or 64-bit) and above
- *Framework:* Django Rest
- *Source Code Editor/IDE:* Jupyter Notebook (Anaconda 3), PyCharm Community Edition 2019.3.3, Android Studio 4.0
- *Programming Language:* Python, HTML, CSS

Algorithms:

Pre-processing of Dataset Images:

Begin

- For each symbol image in the dataset do
- Read the image Convert image to grayscale image and then invert the image
- Perform binary thresholding on the image
- Reshape the bounding boxes to the required dimensional representation

End

Training Model :

Begin

- Create a sequential convolution neural network model
- Add a 2D convolutional layer to process the 2D input images.
- Pass an input size argument to the first layer
- Max pooling is then used to reduce the spatial dimensions of the output volume.
- Add another convolutional + max pooling layer
- Add a Dropout layer in which randomly selected neurons are ignored during training.
- Add a flatten layer which prepares a vector for the fully connected layers.
- Create dense layers
- Compile the model
- Train the model with the dataset for a fixed number of epochs

End

Testing:

Begin

Extract the model from the saved json file

Load weights into a new model

If image is uploaded Then

Read the uploaded image

Convert image to grayscale image and then invert the image

Perform binary thresholding on the image

Perform dilation on the image

Obtain bounding boxes for each symbol in the image

Resize the bounding boxes to the required dimensions

Reshape the bounding boxes to the required dimension al representation

Using the model, predict the corresponding digit/symbol for each bounding rectangle and store it in a string.

Else

Display error message

End

Architecture Diagram:

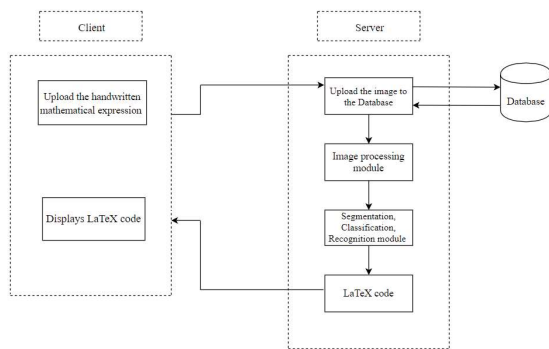


Fig 1: Architectural Diagram

Basic controls for uploading of handwritten mathematical equations are provided. This image will be sent directly to the webservice. The upload control also requires to upload the image first to the server before saving it to the database. The server does the image processing on the input image and returns the LaTeX equivalent to the client.

Snapshots:



Fig 1.Home Page

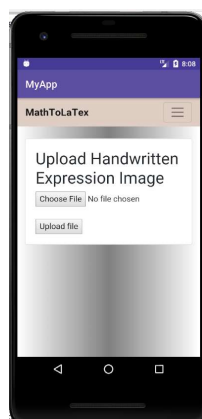


Fig 2.Upload Tab

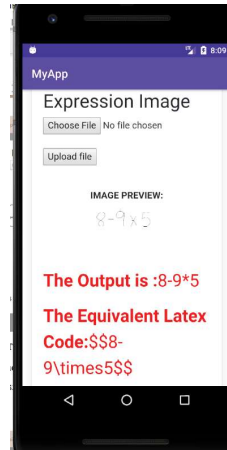


Fig 3.The LaTeX output

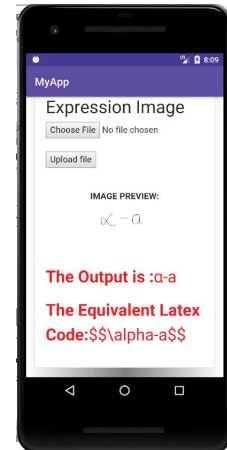


Fig 4.The LaTeX output

Faculty Achievements

Journal Publications

1. Dr. Sridevi Saralaya has published the paper "A Survey on Various Cloud Storage Schemes for Preserving Privacy and Preventing Data Loss" in the International Journal of Engineering Research & Technology (IJERT), Volume 7, Issue 8, 2019, pg 1-4, ISSN: 2278-0181.
2. Dr. Sridevi Saralaya, Dr. Vishwas Saralaya, and Dr. Rio D' Souza have published the paper "A Rule-Based Approach for Multi-Perspective Adaptation of Service-Based Systems" in Int. J. of Electronic Governance. Vol.11 No.2.
3. Dr. Sridevi Saralaya, Dr. Vishwas Saralaya and Dr. Rio D' Souza have published the paper "Compliance Management in Business Processes" in Digital Business: Business Algorithms, Cloud Computing and Data Engineering, Volume 21, ISBN 978-3-319-93940-7.
4. Dr. Sridevi Saralaya, Dr. Vishwas Saralaya and Dr. Rio D' Souza have published the paper "Temporal Impact Analysis and Adaptation for Service-Based Systems" in International Journal of Information and Communication Technology, Vol.14 No.4.
5. Dr. Sridevi Saralaya, Dr. Vishwas Saralaya, and Dr. Rio D' Souza have published the paper "Cross-layer Impact Analysis and Adaptation of Hierarchical Service-based Applications in Service-Oriented Computing and Applications.
6. Binu K. G., Vijay V. S., Anusha M. M., Anoop C. V., Shreeranga Bhat, and Dr. Rio D' Souza have published the paper "Influence of Epistemic Curiosity on the Study Approaches of First-Year Engineering Students" in Procedia Computer Science 172 (2020) 443-451
7. Ashwin T S and Ram Mohana Reddy Guddeti, have published the paper "Affective database for e-learning and classroom environments using Indian students' faces, hand gestures and body postures" in Future Generation Computer Systems, 2020, 108, 334-348 (Impact Factor: 4.6).
8. Ashwin T S and Ram Mohana Reddy G, have published the paper "Impact of Inquiry Interventions on Students in E-Learning and Classroom Environments using Affective Computing Framework" in User Modeling and User-Adapted Interaction 1- 43 (2020). DOI:10.1007/s11257-019-09254-3 (Impact Factor: 3.5).
9. Supriya Saliyan, Akhileshwari K.G published paper "IoT Device and Service Discovery Framework" in the International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8 Issue-2S6, July 2019

Conference Publications

1. Mr. Shreenath Acharya has presented a paper titled "A Comparative Study on Homomorphic Encryption Schemes in Cloud Computing" in IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT-2018).
2. Ms. Babitha has presented a paper titled "A survey on the machine learning techniques used in IVF treatment to improve success rate" in RTESIT-2019, at Yenepoya Institute of Technology, Moodbidri

Book Chapter

1. Rohit Sharma, Ashwin T S and Ram Mohana Reddy Guddeti (2019), "A Novel Real-Time Fac" in Recent Findings in Intelligent Computing Techniques (pp. 193-204), Springer, Singapore. DOI: 10.1007/978-981-10-8639-7 25.
2. 2. Abraham Gerard Sebastian, Shreya Singh, Manikanta Pbt, Ashwin T S and G Ram Mohana Reddy (2019), "Multimodal Group Activity State Detection for Classroom Response Sys-

tem Using Convolutional Neural Networks" in Recent Findings in Intelligent Computing Techniques (pp. 245-251). Springer, Singapore. DOI: 10.1007/978-981-10-8639-7 20.

3. Md. Shahzad Alam, Ashwin T S, and G. Ram Mohana Reddy, (2020) "Optimized Object Detection Technique in Video Surveillance System Using Depth Images" in Smart Computing Paradigms: New Progresses and Challenges (pp. 19-27). Springer, Singapore. ISSN: 2194-5357

Resource Persons

1. Dr. Usha Divakarla had been the resource person for the FDP on "Emerging Trends in Computer Science and Engineering", organized by Dayanand Sagar University, Bengaluru, from June 10 to June 15, 2020.
2. Dr. Usha Divakarla had been the resource person for the FDP on "Innovative Research Trends in Information Technology", organized by PES Institute of Advanced Management Studies, Shimoga, from June 17 to June 22, 2020.
3. 3. Mr. Shreenath Acharya was the speaker for the session on "Frame Relay and Asynchronous Transfer Mode" , held at S N M Polytechnic, Moodbidri on March 7, 2020

Online Courses

1. Dr. Sridevi Saralaya has completed the "Big Data Modeling and Management System" course offered through Coursera
2. Dr. Ashwin T S has completed the courses "Programming for everybody" and "Python Data Structures" offered by the University of Michigan through Coursera.
3. Dr. Kavitha Mahesh has completed the "Data Mining" course offered through NPTEL
4. Mr. Shreenath Acharya has completed the courses "Introduction to Machine Learning" "Data Mining" offered through NPTEL
5. Ms. Sunitha Guruprasad has completed the courses "Data Mining" and "Database Management" offered through NPTEL
6. Ms. Smitha V George has completed the course "Data Mining" offered through NPTEL
7. Ms. Gayana M N has completed the course on "Data Mining" from NPTEL
8. Ms. Renuka Tantry has completed the "Blockchain Technology" course offered through Coursera
9. Ms. Vijetha U has completed the courses "Neural networks and deep learning" and "Git and Github" offered through Coursera
10. Ms. Evita Coelho has completed the courses "Introduction to HTML5", "Introduction to CSS", "Interactivity with JavaScript" and "Advanced Styling With Responsive Design" offered through Coursera and the course "Teaching with Matlab" offered by Mathworks.
11. Ms. Anusha M M has completed the courses "Python for Data Science and Machine Learning Bootcamp" offered by Udemy, the " IU-CEE International Engineering Educator Certification Program" offered by IUCEE and the course "Teaching with Matlab" offered by Mathworks.
12. Ms. Chaithra has completed the course "Image Classification with CNNs using Keras" offered through Coursera.
13. Ms. Sona Mundody has completed the courses "Programming for Everybody (Getting Started with Python)", " Data Analysis and Representation, Selection and Iteration" offered through Coursera and the course "Learn Machine Learning by Building Projects" offered by Eduonix Learning Solutions.
14. Ms. Nisha J Roche has completed the courses "Programming for Everybody (Get-

- ting Started with Python)", "Python Data Structures", "Python for web development" and "Blockchain and Cryptocurrency Explained", "Image Classification with CNN using Keras" offered through Coursera, "How to build Chatbot" course offered by Cognitive.ai and the course "Teaching with Matlab" offered by Mathworks.
15. Ms. Eden Sequeira has completed the courses "Python Programming", "Python Data Structures" and "The Data Scientist's Toolbox" offered through Coursera
 16. Ms. Babitha has completed the courses "Machine learning A-Z Hands-on Python" and "Machine Learning Classification boot camp in Python" offered by Udemy.



Students' Achievements

Funded Projects

1. The project titled " Eye in the Sky " by Mr. Sushanth Sapaliga, Ms Princi Paul DSilva, Mr Rachel Pinto, Ms S B Shubha under the guidance of Ms. Vijetha U has received a fund of Rs 4500 by Karnataka State Council for Science and Technology.
2. The project titled " Conversion of Handwritten Mathematical Expression into LaTeX " by Ms. Ashwini K, Ms A Navya, Ms. Elrica Neha Costa, Ms Lyvia Greema Pereira under the guidance of Ms. Chaithra has received a fund of Rs 2500/- by Karnataka State Council for Science and Technology.
3. The Project titled " VISCON -Visual Conversation a speech hand sign conversion system " by Mr. Guru Saurabh, Mr Joel Miranda, Ms Halit Maria DSouza, Ms Jovita Adline Cutinha under the guidance of Ms. Lavina DSilva has received a fund by VTU TEQUIP.

Workshops Attended

1. Ms, Ankitha of the second year attended an App development workshop during the incident'2020 held on February 15 to 16 at NITK Surathkal.
2. Ms. Ankitha Rai K of the second year has attended a workshop titled "Cyber Security" on 21st October 2019 at SJEC, Vamanjoor.
3. Ms. Ankitha Rai of the second year has attended a workshop titled " Machine learning" by IIT Maharashtra from 28th September to 29th September 2019 at VCET, Puttur
4. Ms. Ankitha of the second year has attended a workshop titled "Cyber Security" on 21st October 2019 at SJEC, Vamanjoor.
5. Ms. Andrea Fernandes of the third year has attended a workshop titled " Image processing" by Manipal Institute of Technology from 28th February to 29th February 2020 at SJEC, Vamanjoor.

Extra-Curricular Activities

1. Mr. Gowda Karthik Balgopal of fourth-year secured second place in VTU Mangalore Zonal Volleyball Tournament 2020-21 held on March 5-6 2020 at VCET, Puttur.
2. Mr Gowda Karthik Balgopal of fourth-year secured third place in Volleyball Tournament during INCIDENT'20 held on February 27 - March 01, 2020, at NITK, Surathkal.
3. Ms. Divyashree V of the sixth semester participated in the National Level NSS camp at Bagalkote and has won 2nd prize in inter-school District level Kho-Kho play at Mangala stadium Mangaluru.
4. Mr. Aronstun Ralph D'Souza of the third year, secured first place in Master of Ceremony during Intra-College competitions held on 24th February 2020 at SJEC, Mangalore
5. Mr. Aronstun Ralph D'Souza of third-year secured second place in the skit (Team - Troup-

- ers) during Intra-College competitions held on 27th February 2020 at SJEC, Mangalore.
6. Mr. Aronstun Ralph D'Souza of third-year secured second place in Book review activity conducted by Library Advisory Committee held on 25th February 2020 at SJEC, Mangalore.
 7. Ms. Anisha D'Souza of second year secured first place in SJEC Mangalore Throwball Tournament 2019-20 held in October 2020 at SJEC, Mangalore.
 8. Ms. Ankitha of second year secured first place in SJEC Mangalore Throwball Tournament 2019-20 held on October 2020 at SJEC, Mangalore and first place in SJEC sports meet 4*100 metres Relay 2019-2020 held on 12 March, 2020 at SJEC.
 9. Ms. Ausha J Shetty of second year secured first place in SJEC Mangalore Throwball Tournament 2019-20 held on October 2020 at SJEC, Mangalore and first place in SJEC sports meet 4*100 metres Relay 2019-2020 held on 12 March, 2020 at SJEC.
 10. Ms. Vinaya Shetty of third year secured second place in Kavana Spardhe-2020 held on 26 April 2020 at Kundapur.
 11. Ms. Kavitha Rao of third year secured first place in Eastern Dance (group) event at the State Level Intercollegiate Cultural, Technical and Management fest held in April 2019 at Mangalore Institute of Technology & Engineering, Mangalore.

Internship

1. Ms. Lahari of the third year has attended the "android development" internship by Zephyr Technologies Ltd from 1st July to 31st July 2019 at Balmatta, Mangaluru.

Online Coding Contest

Mr. Winston Sebastian Pais of third year won 1st prize in State Level Coding Contest "Debug Your LockDown HACK-2020" organized by Indian Society for Technical Education Karnataka-Section.

ONLINE COURSES COMPLETED BY STUDENTS

Sl No	Name	Year of studying	Course Title	MOOC Name	Completion Date
1	Aaron Lobo	II	C++ Tutorials for Complete Beginners by John Purcell	Udemy	April 2020
2	Abhi K.V	II	C++ Tutorial for Complete Beginners	Udemy	April 3, 2020
			Introduction to Symbolic Math	Mathworks	April 2020.
3	Anisha Dsouza	II	C++ Tutorial for Complete Beginners	Udemy	March 2020
	Ankitha Rai K	II	Python for Data Science	NPTEL	March 2020
			Programming with C++	Udemy	April 2020
4	Ankitha	II	Introduction to Symbolic Math	Mathworks	May 2020
5	Anusha J Shetty	II	Programming in C++	NPTEL	Mar 2020

Sl No	Name	Year of studying	Course Title	MOOC Name	Completion Date
			Introduction to Symbolic Math	MathWorks	May 2020
6	Anusha A T	II	C++ Tutorial for complete Beginners	Udemy	April 2020
			Introduction to Symbolic Math	MathWorks	April 2020
7	Novin Misquith	II	Programming for Every-body	Coursera	May 2020
			Python Data Structures	Coursera	May 2020
			Capstone: Retrieving, Processing and Visualizing Data with Python	Coursera	May 2020
			Using Python to Access Web Data	Coursera	May 2020
			Using Database with Python	Coursera	May 2020
8	Prathvi N B	II	Introduction to Symbolic Math	MathWorks	
9	Raksharaj Shetty	II	Complete Python Boot-camp:Go from zero to hero in Python 3	Udemy	March 2020
10	Revisha	II	Programming for Every-body	Coursera	June 2020
			MATLAB Onramp	MathWorks	April 2020
12	Rhea Benedicta D'Souza	II	Career Edge-Knockdown the Lockdown	TCS	May 2020
			C++ Tutorials for Complete Beginners	Udemy	April 2020
			Programming for Every-body	Coursera	June 2020
			Python Data Structures	Coursera	June 2020
			Introduction to Symbolic Math with MATLAB	MathWorks	March 2020
			Introduction to HTML	Coursera	June 2020
			The Complete Android Application Development Course:Build and Create Apps	St Aloysius College Mangalore	June 2020

Sl No	Name	Year of studying	Course Title	MOOC Name	Completion Date
13	Sana Parveen	II	Learn to Code	MIMO	June 2020
			C++ Tutorials for Complete Beginners	Udemy	March 2020
			Programming for Everybody	Coursera	June 2020
14	Shanwill Pinto	II	Neural Networks and Deep Learning	Coursera	May 2020
			Image Classification with CNNs using Keras	Coursera	May 2020
			Natural Language Processing in TensorFlow	Coursera	July 2020
			Deep Learning Prerequisites: The Numpy Stack in Python	Udemy	April 2020
15	Sudhiksha S Prabhu	II	Programming for Everybody	Coursera	June 2020
			C++ tutorials for complete beginners	Udemy	March 2020
			Introduction to Symbolic Math with MATLAB	MathWorks	March 2020
14	Tanusha Attavar	II	Introduction to Symbolic Math with MATLAB	MathWorks	May 2020
15	Shravya A	II	C++ Tutorial for Complete Beginners	Udemy	March 2020
			Python for Everybody	Coursera	June 2020
			Python Data Structure	Coursera	June 2020
			Excel Skills for Business: Essentials	Coursera	June 2020
			Introduction to symbolic math with MATLAB	MathWorks	April 2020
			MATLAB Onramp	MathWorks	January 2020
16	Simmonne Pinto	II	Python for Beginners		
			Python Data Structures		
			Accessing web data using Python		
			Databases using Python		
			HTML, CSS, and JavaScript for developers		

Sl No	Name	Year of studying	Course Title	MOOC Name	Completion Date
			Interactivity with JavaScript		
			Full stack web development and multiplatform app development	Udemy	
17	Srishti Bhandarkar	II	Machine Learning for All		June 2020
			Neural Networks and Deep Learning		June 2020
			Programming for Everybody	Coursera	June 2020
			C++ Tutorial for Complete Beginners	Udemy	April 2020
			Career Edge – Knockdown the Lockdown	TCS	May 2020
			Python Data Structures	Coursera	June 2020
			Build Your Portfolio Website with HTML and CSS	Coursera	June 2020
			HTML, CSS, and JavaScript for Web Developers	Coursera	June 2020
18	Siona Misha Nazareth	II	Python for Everybody(Getting Started with python)	Coursera	June 2020
			C++ tutorial for beginners	Udemy	April 5 2020
			MATLAB Onramp	Mathworks	March 2020
19	Supritha G	II	Google Cloud Platform Fundamentals: Core Infrastructure	Coursera	July 2020
			Introduction to Symbolic math with MATLAB	MATLAB	February 2020
20	Shaz Rasheed Hussain	II	C++ tutorials for complete beginners	Udemy	April 2020
			Python for Everybody	Coursera	June 2020
			IT Security : Defense against the digital dark arts	Coursera	July 2020
21	Shetty Lakshmi Jaysheel	II	C++ tutorial for complete beginners	Udemy	April,2020

Sl No	Name	Year of studying	Course Title	MOOC Name	Completion Date
22	Swathi Prabhu K	II	AI for everyone	Coursera	July 2020
			CSS	Coursera	July 2020
			Introduction to Web development HTML5	Coursera	June 2020
			Programming for everybody python	Coursera	June 2020
			TCS Ion career edge		May 2020
23	Sujani K M	II	Google Cloud Infrastructure Fundamentals: Core Infrastructure	Coursera,	July 2020
			Introduction to Symbolic math with MATLAB	Mathworks	March 2020
			C++ tutorial for complete Beginners	Udemy	March 2020
24	Sriganesh	II	Python for Everybody	Coursera,	July 2020.
			Python Data Structures	Coursera,	
			Using Python to Access Web Data	Coursera,	July 2020
			Using Databases with Python	Coursera	July 2020
			" Capstone: Retrieving, Processing, and Visualizing Data with Python	Coursera	July 2020
			Introduction to HTML5	Coursera	July 2020
25	K Nisha	II	Cybersecurity Awareness and Innovation	Coursera	June 2020
			Cybersecurity and the X-factor	Coursera	March 2020
			Java (Basic)	HackerRank	March 2020

SI No	Name	Year of studying	Course Title	MOOC Name	Completion Date
26	Karthik D N	II	Introduction to Symbolic Math with MATLAB	MathWorks	July 2020
			C++ tutorials for complete beginners	Udemy	March 2020
			Java Tutorial Course	SoloLearn	April 2020
			C tutorial course	SoloLearn,	May 2020
			Build a Simple App in Android Studio with Java	Coursera	May 2020
			Java for Android	Coursera	May 2020
			Introduction to HTML5	Coursera	June 2020
27	Kiran Biradar	II	MATLAB Onramp	MathWorks	July 2020
			C++ Tutorial for Complete Beginners	Udemy	March 2020
			Solving Nonlinear Equations with MATLAB	MathWorks	April 2020
			Introduction to Symbolic Math with MATLAB	MathWorks	April 2020
			Frontend Fundamentals	PIRPLE.COM	April 2020
			Machine Learning	Intershala Trainings	April 2020
28	Joel D'Souza	II	C++ Tutorial for Complete Beginners	Udemy	April 2020
			SQL for Data Science	Coursera,	March 2020
			Python Basics	Coursera,	June 2020
			Artificial Intelligence in Web Design"	Udemy	June 2020
			Computer Architecture: Measure for Design & Analysis	Udemy	July 2020
			Java Programming: Complete Beginner to Advanced	Udemy	July 2020
29	Jennifer Serrao	II	C++ Tutorial for Complete Beginners	Udemy	July 2020
			Programming for Everybody (Getting Started with Python)	Coursera	April 2020
			Python Data Structures	Coursera	June 2020

Sl No	Name	Year of studying	Course Title	MOOC Name	Completion Date
30	Dale Vas	II	Introduction to Symbolic Math with MATLAB	MathWorks	July 2020.
			Java Course	Progate	
31	Treesa Antony	III	IUCEE EWB India Student Leadership 2020	IUCEE	March 2020
			Introduction to Programming using Javascript	Microsoft Technologies	July 2020.
32	Vinaya A Shetty	III	Introduction to Programming using Javascript	Microsoft Technologies	September 2019
			AWS Fundamentals: Going Cloud Native	Coursera	March 2020
			Python Data Structures	Coursera	June 2020
			Programming for Everybody	Coursera	June 2020
33	Vinayaka Udupa A	III	Data Science and Machine Learning	EdX	June 2020
34	Zohra Reem	III	Introduction to psychology	Coursera	June 2020
			Machine Learning Foundation	Coursera	June 2020
			Introduction to Internet of things and Embedded Systems	Coursera	June 2020
35	Kavitha Rao	III	Introduction to Programming using JavaScript	Microsoft MTA	September 2019
			Diploma in python	MICE	10th January 2019- 25 April 2019
36	Princy P Dsilva	III	Artificial Intelligence A-Z : Learn how to build an AI	Udemy	June 25 2020
37	. Anurag D Shetty	III	Career Edge - Knockdown the Lockdown	TCS-ion Digital learning Hub	Apr 2020
38	Joysil Saldanha	III	SQL for Data Science	Coursera	June 2020
39	Job Alexander	III	Introduction to Cybersecurity Tools & Cyber Attacks	Coursera	June 2020

Sl No	Name	Year of studying	Course Title	MOOC Name	Completion Date
			Programming for Everybody (Getting Started with Python)	Coursera	June 2020
			Python Data Structures	Coursera	June 2020
40	Gowtham-Raj	III	Web Analytics	Accenture	May 2020
41	Sandhyashree	III	Introduction to programming using Javascript	Microsoft Technology Associate	September 2019
42	Nithesh	III	Python for DataScience	GreyAtom	June 2019

MOUs signed and anchored by the Department

Sl No	Company	Purpose	MoU Signed Date
1	Infosys Pvt. Ltd.	Training & Placement	06-09-2007
2	Kakunje Software Pvt Ltd, Mangalore	Training, Internship & Research	03-10-2018
3	CISCO Networking	Training & Internship	21-02-2020

PhD Awarded

Dr Ashwin T S awarded with the Ph.D degree from NITK Surathkal for his research work titled “Unobtrusive Affective Computing Framework for Students Engagement Analysis in Classroom Environment” under the guidance of Prof.G.Ram Mohana Reddy.



Industry Internships

Sl. No.	Intern Name	Host Company Name	Duration
1.	Colin Nickil Fernandes	Kakunje Software Pvt.Ltd	July 05- Aug 05, 2019
2.	Fernandes Royston Leema	Ardelis Technologies	Sep 19 –May 20, 2019
3.	Reshel Joswita D'Souza	Vitvara Technologies	July 04-Aug 03, 2019
4.	A Navya	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
5.	A Nishmitha	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
6.	Aakif Rasool	Hewlett Packard Enterprise	July 05-Aug 03,2019
7.	Abhishek Joe	Vitvara Technologies	July 04-Aug03, 2019
8.	Adarsh S M	SmartBridge in collaboration with IBM	July 01-26, 2019
9.	Adnaan	Vitvara Technologies	July 04-Aug03, 2019
10.	Aishwarya Shetty	Vitvara Technologies	July 05-Aug 03, 2019
11.	Akshatha A	Kakunje Software Pvt.Ltd	July07-Aug 06, 2019
12.	Aldrin Sean Pereira	Vitvara Technologies	July 04-Aug 03, 2019
13.	Alisha Saldanha	Vitvara Technologies	Jan 07-Feb 07, 2020
14.	Alston Galvin Lobo	Vitvara Technologies	July 05-Aug 03, 2019
15.	Anisha Antony Dsouza	EZ Technologies	July 05-Aug 05, 2019
16.	Anurag D Shetty	Vitvara Technologies	July 04-Aug 04, 2019
17.	Anwitha A	Vitvara Technologies	July 05-Aug 03, 2019
18.	Apsara	Accolade Tech Solution	Jan 07-Feb 04, 2020
19.	Archana K L	EZ Technologies	July 05-Aug 052019
20.	Ashwini K	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019

Sl. No.	Intern Name	Host Company Name	Duration
21.	Aston Dsouza	Vitvara Technologies	July 04-Aug 03, 2019
22.	B Athul Pai	Vitvara Technologies	July 04-Aug 03, 2019
23.	C Nausheen Nazeer	Vitvara Technologies	July 05-Aug 03, 2019
24.	Chandrakanth L	Vitvara Technologies	July 05-Aug 03, 2019
25.	Cheryl Lina Mathias	Vitvara Technologies	July 05-Aug 03, 2019
26.	Crystal Fay Dsouza	Vitvara Technologies	July 05-Aug 03, 2019
27.	Deepesh Bhat C	Vitvara Technologies	July 04-Aug 03, 2019
28.	Elrica Neha Costa	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
29.	Gladys Anil	Vitvara Technologies	July 05-Aug 03, 2019
30.	Glen Ignatius Lobo	Vitvara Technologies	July 05-Aug 03, 2019
31.	Gowda Karthik Balgopal	Kakunje Software Pvt.Ltd	July 06-Aug 09, 2019
32.	Guru Saurabh B	Vitvara Technologies	July 04-Aug 03, 2019
33.	H G Deeksha	EZ Technologies	July 05-Aug 05, 2019
34.	Halit Maria D'souza	EZ Technologies	July 05-Aug 05, 2019
35.	Ivor Dsouza	Hewlett Packard Enterprise	July 05-Aug 03, 2019
36.	Jaahnvi Hehar	Hewlett Packard Enterprise	July 04-Aug 04, 2019
37.	Jalaj Tripathi	SmartBridge in collaboration with IBM	July 01-July 26, 2019
38.	Jeevan	Vitvara Technologies	July 04-Aug 03, 2019
39.	Job Alexander	Vitvara Technologies	July 05-Aug 03, 2019
40.	Joel Miranda	EZ Technologies	July 05-Aug 05, 2019

Sl. No.	Intern Name	Host Company Name	Duration
41.	Jovita Adline Cutinha	Ardelis Technologies	Sep 19-May 20, 2019
42.	Joysil Saldanha	EZ Technologies	July 05-Aug 05, 2019
43.	Kausalya K Naik	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
44.	Keerti	EZ Technologies	July 05-Aug 05, 2019
45.	Krishnakantha Upadhyaya	Vitvara technologies	July 05-Aug 03, 2019
46.	Kushi Salian	Vitvara Technologies	July 05-Aug 03, 2019
47.	Lyvia Greema Pereira	Zephyr Technologies and Solutions	July 08-Aug 10, 2019
48.	Madhushree	Verzeo EduTech	July 01-Aug 31, 2019
49.	Mahima V. Murthy	Verzeo EduTech	July 01-Aug 31, 2019
50.	Manish Dhruva M	Sigma9 Technologies	July 08-Aug 06, 2019
51.	Manoja Krishna Dama-le	E Z Technologies with Pooja and Pallavi	July 05-Aug 05, 2019
52.	Mariah Sneha Hudson	Vitvara Technologies	July 05-Aug 03, 2019
53.	Mary Tincy M J	Vitvara Technologies	July 05-Aug 03, 2019
54.	Maxim Vishal Monteiro	Vitvara Technologies	July 04-Aug 03, 2019
55.	Melitta Sneha Lewis	Zephyr Technologies and Solutions	July 08-Aug 10, 2019
56.	Merin Sara Abraham	Vitvara Technologies	July 05-Aug 03, 2019
57.	Merrill John Fernandes	Accolade Tech Solution	July 04-Aug 05, 2019
58.	Mohammed Hakeeb Javid	Vitvara Technologies	July 06-Aug 05, 2019
59.	Mohammed Sahil	Sigma9 Technologies	July 08-Aug 06, 2019
60.	Mranali Gourish Ganonkar	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019

Sl. No.	Intern Name	Host Company Name	Duration
61.	Nasil Saniah	Kakunje Software Pvt.Ltd	July 06-Aug 09, 2019
62.	Naveen S Pai	Vitvara technologies	July 05-Aug 03, 2019
63.	Akshata A Tandel	Kakunje Software Pvt.Ltd	July 06-Aug 09, 2019
64.	Mridula	Mindfleck Pvt. Ltd	July 05-Aug 05, 2019
65.	Neha S Shetty	Mindfleck Pvt. Ltd	July 05-Aug 05, 2019
66.	Nigel DCosta	Visionest Technologies	July 15-Aug 10, 2019
67.	Niharika S Rao	Mindfleck Pvt. Ltd	July 05-Aug 05, 2019
68.	Nikitha Florence Borg-es	Zephyr Technologies and Solutions Pvt. Ltd	July 10-Aug 10, 2019
69.	Nilay Ambalal Kaneria	Kakunje Software Pvt.Ltd	Jan 09-Feb 09, 2020
70.	Nishal G V	Vitvara Technologies	July 04-Aug 03, 2019
71.	Nishchit	Kakunje Software Pvt.Ltd	Jan 03-Jan 30, 2020
72.	Nithin Raj B.C	Accolade Tech Solution	July 04-Aug 05, 2019
73.	Oliva Sharol Correa	Zephyr Technologies and Solutions Pvt. Ltd	July 10-Aug 10, 2019
74.	Pallavi	EZ Technologies	July 05-Aug 05, 2019
75.	Pooja C H	EZ Technologies	July 05-Aug 05, 2019
76.	Prathap Kumar P	Vitvara Technologies	July 04-Aug 05, 2019
77.	Preetham Pai D	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
78.	Princy Paul Dsilva	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
79.	Puneetha K R	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
80.	Rachel Pinto	Accolade Tech Solution	July 04-Aug 05, 2019
81.	Rajani R	Kakunje Software Pvt.Ltd	July 06-Aug 06, 2019

Sl. No.	Intern Name	Host Company Name	Duration
82.	Reena Victoria Rodrigues	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
83.	Riona Steffi Nazareth	Zephyr Technologies and Solutions Pvt. Ltd	July 10-Aug 10, 2019
84.	Roswin H Fernandes	Diya Systems Pvt Ltd.	Aug 04-Sep 06, 2019
85.	Royston Antony Noronha	Kakunje Software Pvt.Ltd	July 06-Aug 09, 2019
86.	S B Shubha	Accolade Tech Solution	July 04-Aug 05, 2019
87.	Sagar S J	Accolade Tech Solution	July 04-Aug 05, 2019
88.	Sajini V B	Accolade Tech Solution	July 04-Aug 05, 2019
89.	Samantha Mary Rodrigues	Accolade Tech Solution	July 04-Aug 05, 2019
90.	Satyam	Kakunje Software Pvt.Ltd	July 06-Aug 09, 2019
91.	Shameek M	Diya Systems Pvt Ltd.	Aug 04-Sep 06, 2019
92.	Shashank S Reddy	SmartBridge in collaboration with IBM	July 01-July 26, 2019
93.	Shefali Johnas	Rexroth Bosch Group, Mivn Engg. Technologies (P) Ltd	July 08-Aug 08, 2019
94.	Shelden Samuel Pereira	Accolade Tech Solution	July 04-Aug 05, 2019
95.	Shetty Shreenidhi V	TrainIT, Khambalpada, Dombivli, Thane	July 08-Aug 08, 2019
96.	Shravan Baliga K	Accolade Tech Solution	July 04-Aug 05, 2019
97.	Shreema Simran	Xencia Technology Solutions Pvt Ltd.	July 10-Aug 09, 2019
98.	Sthuthi Sadananda	Visionest Technologies	July 15-Aug 10, 2019
99.	Sugandh Kumar	Vitvara Technologies	July 04-Aug 05, 2019
100.	Sushan Suresh Sapaliga	Kakunje Software Pvt.Ltd	July 06-Aug 09, 2019
101.	Tejas N Suvarna	Diya Systems Pvt Ltd.	Jan 15-Feb 20, 2020

Sl. No.	Intern Name	Host Company Name	Duration
102.	Vaishnavi D S	Kakunje Software Pvt.Ltd	July 07-Aug 06, 2019
103.	Vanessa Ruth Dsouza	Accolade Tech Solution	July 04-Aug 05, 2019
104.	Vashitha G	Accolade Tech Solution	July 04-Aug 05, 2019
105.	Vinuta Shridhar Moger	Accolade Tech Solution	July 04-Aug 05, 2019
106.	Winston Dsouza	Visionest Technologies	July 15-Aug 10, 2019
107.	Pooja H	Indian Institute of Technology, Hyderabad.	July 09-Aug 02, 2019
108.	Aliptha Pejavar	Rexroth Bosch Group, Mivn Engg. Technologies (P) Ltd	July 08-Aug 08, 2019
109.	Aishwarya	Hewlett Packard Enterprise Delivery Center, Mangalore.	July 04-Aug 02, 2019
110.	Akshay	Vitvara Technologies	July 04-Aug 03, 2019
111.	Chaithra S R	Vitvara Technologies	July 04-Aug 03, 2019
112.	Chaithra Shetty B S	Vitvara Technologies	July 04-Aug 03, 2019
113.	Deeshma Shetty B S	Vitvara Technologies	July 04-Aug 03, 2019
114.	Goutham Raj	Vitvara Technologies	July 04-Aug 03, 2019
115.	Mahesh R N	Vitvara Technologies	July 04-Aug 03, 2019
116.	Moidu Kunhi	Vitvara Technologies	July 04-Aug 03, 2019
117.	Nishali Krithika	Hewlett Packard Enterprise Delivery Center, Mangalore.	July 04-Aug 02, 2019
118.	Nithesh	Vitvara Technologies	July 04-Aug 03, 2019
119.	Poornima S Banavalikar	Vitvara Technologies	July 04-Aug 03, 2019
120.	Prajnha P J	Vitvara Technologies	July 04-Aug 02, 2019-2019
121.	Rasika N Surangekar	Vitvara Technologies	July 04-Aug 03, 2019

Sl. No.	Intern Name	Host Company Name	Duration
122.	Sandhyashree	Hewlett Packard Enterprise Delivery Center, Mangalore.	July 04-Aug 02, 2019
123.	Sumith A	Vitvara Technologies	July 04-Aug 03, 2019
124.	Varun K	Vitvara Technologies	July 04-Aug 03, 2019
125.	Reddy Ashok	Hewlett Packard Enterprise	July 04-Aug 02, 2019
126.	Shriyankar Awasthi	Vitvara Technologies	Jan 15- Feb 15, 2020
127.	Asha S	TechSpiritz, Mangaluru	Jan 13-Feb 07, 2020
128.	Harshitha N	TechSpiritz, Mangaluru	Jan 13-Feb 07, 2020
129.	Shrinivas Dayanand Kini	Vitvara Technologies	July 04-Aug 03, 2019



Placements

Sl. No.	Student Name	Company Placed
1	A. Navya	Global Esoftsys
2	A Nishmitha	Capgemini
		Infosys
		LTI
3	Abhishek Joe	Birlasoft
		Juspay
4	Adarsh S M	Birlasoft
		Infosys
5	Adnaan	Artech
6	Aishwarya Shetty	TCS
		VMWare
7	Akshata Ashok Tandel	Birlasoft
8	Alisha Saldanha	Artech
9	Anisha Antony D'Souza	DXC Technology(Product)
10	Anurag D Shetty	ITC Infotech
		Wipro

11	Anwitha A	Infosys
		Mindtree
		TCS
		Wipro
12	Apsara	Artech
13	Archana K.L	Cognizant
		Global Esoftsys
		Infosys
		Mphasis
		Wipro(phase 2)
14	Ashwini K	Infosys
15	Aston D'Souza	Infosys
16	B. Athul Pai	Global Esoftsys
17	Chandrakanth L	Analytic Quotient
		ITC Infotech
18	C Nausheen Nazeer	DXC Technology
		Artech
19	Cheryl Lina Mathias	Capgemini
		Infosys
		TCS
		Wipro
20	Deepesh Bhat C	Cognizant
		Novigo Solutions
21	Elrica Neha Costa	Capgemini
		Infosys
		DXC Technology(Product)
22	Gladys Anil	Artech
23	Glen Ignatius Lobo	InfyTQ
		ITC Infotech
24	Gowda Karthik Balgopal	ITC Infotech
25	Guru Saurabh B	Infosys
		Wipro
26	H G Deeksha	Infosys
		TCS
		Wipro(phase 2)
27	Halit Maria Dsouza	TCS
		Wipro

28	Ivor Dsouza	ITC Infotech
		Juspay
		TCS
		Wipro
29	Jaahnvi Hehar	Analytic Quotient
		TCS
30	Jeevan	ITC Infotech
31	Job Alexander	Infosys
32	Joel Miranda	Artech
33	Jovita Adline Cutinha	Birlasoft
		Wipro(phase 2)
34	Joysil Saldanha	Analytic Quotient
35		TCS
36	Kausalya K Naik	Infosys
37	Keerti	ITC Infotech
		TCS
28	Krishnakantha Upadhyaya	ITC Infotech
		Wipro
38	Kushi Salian	ITC Infotech
30	Lyvia Greema Pereira	Artech
31	Madhushree	TCS
32	Mahima V Murthy	LTI
		TCS
		Wipro
33	Manish Dhruva Mohan	Birlasoft
34	Manoja Krishna Damale	Infosys
		Sonata Software
35	Mariah Sneha Hudson	Infosys
36	Mary Tincy M J	Infosys
37	Maxim Vishal Monteiro	Global Esoftsys
38	Melitta Sneha Lewis	Infosys
		TCS
39	Merin Sara Abraham	Infosys
		Mphasis
40	Merrill John Fernandes	Amazon
		Artech
41	Mohammed Hakeeb Javid	Infosys
42	Mohammed Sahil	DXC Technology

43	Mranali Gourish Gaonkar	Infosys
		Robosoft Technologies
		Wipro(phase 2)
44	Mridula	DXC Technology
		Global Esoftsys
		DXC Technology(Product)
45	Nasil Saniah	Analytic Quotient
		TCS
46	Naveen S Pai	Cargill
		InfyTQ
		ITC Infotech
		TCS
47	Neha S Shetty	DXC Technology
		Infosys
		Artech
48	Nigel Dcosta	Cargill
		ITC Infotech
		TCS
49	Niharika.S.Rao	Artech
50	Nikitha Florence Borges	Cognizant
		Infosys
51	Nilay Ambalal Kaneria	Artech
52	Nishchit	Infosys
53	Nithin Raj B C	Infosys
		LTI
54	Oliva Sharol Correa	Infosys
		Mphasis
		Wipro
55	Pallavi	DXC Technology(Product)
56	Pooja C H	Infosys
		DXC Technology(Product)
57	Prathap Kumar P	[24]7
		Artech
58	Preetham Pai D	Infosys
59	Princy P Dsilva	DXC Technology
60	Rachel Pinto	Infosys
		Wipro(phase 2)
61	Rajani R	Infosys
62	Reena Victoria Rodrigues	Infosys

63	Riona Steffi Nazareth	Birlasoft
64	Roswin Hadrian Fernandes	Wipro(phase 2)
65	Royston Antony Noronha	Infosys
		TCS
		Wipro
66	S B Shubha	Birlasoft
67	Sagar Sj	Artech
68	Sajini V B	Artech
69	Samantha Mary Rodrigues	[24]7
		DXC Technology
70	Satyam	Analytic Quotient
		TCS
71	Shameek M	Cognizant
		Global ESoftsys
		Mphasis
		SAP
72	Shefali Johnas	VMWare
73	Shelden Samuel Pereira	Infosys
74	Shetty Shreenidhi Vishwanath	Infosys
		LTI
		TCS
75	Shravan Baliga K	LTI
76	Shreema Simran	InfyTQ
		LTI
		Cohesity
77	Sthuthi Sadananda	ITC Infotech
		TCS
78	Sugandh Kumar	Kreatio Software
79	Sushan Suresh Sapaliga	InfyTQ
		Maventic
		Wipro
80	Tejas N Suvarna	Cargill
		InfyTQ
		TCS
		Wipro
81	Vaishnavi D.S	LTI
		VMWare

82	Vanessa Ruth Dsouza	[24]7
		DXC Technology
83	Vashitha G	IBM
		Infosys
		Wipro(phase 2)
84	Vinuta Shridhar Moger	Mphasis
		Wipro(phase 2)
85	Winston D Souza	Birlasoft
86	Aliptha Pejavar	Birlasoft
87	Goutham Raj	Artech
88	Poornima S Banavalikar	Artech
89	Colin Fernandes	DXC Technology
		Artech
90	Royston Fernandes	DXC Technology
		Artech

Student Testimonial



When I started my journey at SJEC, being enthusiastic and eager to learn, I became part of a community of teachers and peers that helped me thrive. Throughout the four years, I was presented with varied challenges which SJEC helped me face, by equipping me with the required tools. Our annual national-level tech fest TIARA encouraged me to participate in both technical and non-technical intra and

inter-departmental events. It helped to push me outside my comfort zone, learn the value of teamwork, and collaborate with people from different technical backgrounds. In the department of CSE, students were encouraged to hone their technical skills through various tinkering labs and workshops. Our faculty made classes more interactive through the use of active learning techniques. Students were also allowed to get certifications, which added much-needed value to our CVs. As a final year student, I received ample training in aptitude and soft skills from the weekly V-ACT and I-Point classes, which helped me with campus placements. The exposure to this environment of learning and perseverance at SJEC has prepared me for life as a professional.

Sthuthi Sadananda
Final year B.E. (CSE)



ST JOSEPH ENGINEERING COLLEGE

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Vamanjoor, Mangaluru - 575 028, Karnataka, India

Phone : 91-824-2868100 / 2263753 / 54 / 55 / 56 | FAX: 91-824-2263751

E-mail: sjec@sjec.ac.in | Website: www.sjec.ac.in