ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

Shobhavana Campus, Mijar – 574225, Moodbidri.
Dakshina Kannada Karnataka, India.

A Report on

Computer Society of India Students' Chapter

Computer Society of India™ Since 1965

With

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Prepared By: Dr. Manjunath Kotari, Professor & Head-CSE

INDEX SHEET

1. OBJECTIVES

To be a part of the distinguished fraternity of famous IT industry leaders, brilliant scientists and dedicated academicians through Networking.

1. Professional Development at Individual level.
2. Training and Certification in futuristic areas.
3. International Competitions and association with International bodies like IFIP and SEARCC.
4. Career Support.
5. CSI Awards.
6. Various Publications.

2. MEMBERSHIP BENEFITS

Institution Membership

- Recognition by Accreditation bodies for association with a professional organization
- Grant of Free nominee membership to **three faculty members** with voting rights & log-in privilege on CSI knowledge portal
- 4 copies of CSI Communications every month
- Access to CSI knowledge portal and distinguished speaker list and eligibility for volunteering to be a speaker
- Eligibility to apply for assistance to attend International conferences
- Concessional rates for CSI Conferences and Tutorials for nominees
- Eligibility to publish articles in CSI communications and Transactions for nominees
- Discounted IEEE membership rate for faculty
- Reciprocal membership of BCS, ACS and subsidized product offerings by them
- Benefits available through CSI-IFIP, C-DAC, PMI & Microsoft collaboration

Student Branches (All Advantages of IM Plus)

- Eligibility for nomination of best Student Branch award
- Additional 4 copies of CSI Communications to the institution & log-in privilege to the students on CSI knowledge portal with access to distinguished speaker list

- Attachment to a Regional Student coordinator & National Student coordinator for assistance with resource persons for various events and chapter support to organize seminars / workshops / tutorials / competitions / Expo
- Invitation for all Regional/State/National student conventions/conferences and competitions
- Concessional rates for CSI Conferences and Tutorials for student members
- Opportunity for students to interact with Industry professionals and chalk out a career path
- Eligibility to publish articles in CSI communications and journal for student members
- Eligibility to be nominated for the best Student paper in CSI communications
- Eligibility for CSI funded minor projects (for College Students)
- CSI Certification and Training programs at discounted rates for students
- Permission to conduct events under CSI Banner

Benefits and Advantages to CSI Student members

Recognition :

- CSI membership identity card
- Appreciation letter / certificate for performance excellence
- Industry recognized CSI certification opportunities

Knowledge Enhancement :

- Access to CSI knowledge portal through Login-id and password
- Technology updates through Conferences, Seminars, Tutorials & workshop at discounted rates
- A forum for activities like Paper Presentations, Quiz, Competitions and Exhibitions.
- Ability to connect with distinguished speakers on different technology areas

CSI Publication :

- CSI Communications - Monthly Magazine (soft copy with option for hard copy at additional payment)
- CSI eNewsletter
- CSI Whizkidd- Student Newsletter
- Eligibility to publish articles in CSI communications, journal and Whizkidd

Awards :

- Eligibility to be nominated for the best Student paper in CSI communications
- Best Student Branch award (only for Student Branch and not applicable for individual student members)

Computer Society of India Student Chapter

Activities 2018-19

Project Exhibition

Department of computer science and engineering conducted a final year students Project Exhibition on 26th April, 2019. There were 26 projects of various fields like Cloud Computing, Big Data Analysis, Image Processing, Network Security, Data Mining, Android Applications, RASPBERRY PI, Wireless Sensor Networks, E-Governance, Robotics, Web-services, E- Commerce, Mobile Applications, ERP and Healthcare.

Dr. Roopalaxmi, Dr. Sumith N., Prof. Jayanth Rathod, Mrs. Harshitha GM and Mr. Manjunath H. R had evaluated the projects.

Following is the glimpse of the Project Exhibition Day of Department of Computer Science and Engineering.

IoT Project on "Fuel tanker safety system"

Project on "Sign language communication"

Automatic Water tank Monitoring System

Intelligent Automatic Teller Machine

An android app developed for mushroom disease detection using data mining approach

The following projects were selected as the best projects for this year by judges.

Place	Project associates	Project guide	Title
First	Shilpa Shetty Sridevi Srujana Vishruth	Mrs. Vidya	Analysis of quality of coconut

Second	Adarsha MS Chaitra G Kumaraswamy	Prof. Venkatesh Bhat	Dynamic video stitching via shakiness removal
Second	Ganesh Shrikanth Heisam Sursita Madhukara Mishra Himanshu U	Mrs. Shruthi Shetty	Smart trash segregator dustbin monitoring system

All Projects Work Details CAY (2018-19)

Batch No.	**Students**	**USN**	**Guide**	**Title**	**Domain/Type**
B1.	Pratiksha Rai	4AL15CS070	Ms. Ankitha Shetty	Fuel tanker safety system	IoT/Embedded Systems Application
	Sumith Kumar	4AL15CS095			
	Varsha S	4AL15CS104			
	Shetty Aishwarya	4AL15CS114			
B2.	Kusumasri	4AL15CS099	Mr. Tahir N	Prevention of phishing attacks on voting system using visual cryptography	Network security Review
	Vaibhavi K	4AL15CS102			
B3.	Raja Rajeshwari	4AL15CS075	Mr. Vivek Sharma	Automobile anti theft system	Embedded Real Time systems Application
	Shreyas Rao	4AL15CS088			
	Thripthi A H	4AL15CS101			
B4.	Arjun K	4AL14CS012	Mr. Vivek	AI consultant	Artificial

	AmithD'silva Deekshith Raj	4AL15CS025 4AL15CS048	Sharma	partner	intelligence Review
B5.	Nidhi Aradya	4AL15CS063	Mr. Harish Kunder	Removal of Gaussian impulse noise from computed tomography	Image processing Research
	Meghan G R	4AL15CS056			
	Thejaswini m b	4AL15CS010			
	Sanjay	4AL15CS085			
B6.	Rahul nayak	4AL15CS073	Mrs. Merlyn	Traffic management near U-turns to avoid accident	IoT Application
	Pooja	4AL15CS065			
	Mukesh	4AL15CS060			
	Rakesh	4AL15CS076			
B7.	Sridevi	4AL15CS092	Mrs. Vidya	Analyzing the quality of coconut	Machine Learning Research
	Srujana	4AL15CS093			
	Vishruth	4AL15CS108			
	Shilpa Shetty	4AL15CS086			
B8.	Ashwini Shetty	4AL15CS017	Mr. Chanchal	Advanced data integrity checking mechanism in cloud	Network security Research
	Devika Shetty	4AL15CS027			
	Deeksha Shetty	4AL15CS028			
	Deeksha	4AL15CS030			
B9.	Divya R	4AL15CS032	Dr. Sumith N.	Intelligent Automatic Teller Machine	Algorithm Research
	Megha	4AL15CS055			
	Jasmine	4AL15CS043			
	Jolyn	4AL15CS046			
B10.	Adarsh rai	4AL15CS074	Dr. Mohideen Badhusha S	Recovery of fault node in WSN for smart agriculture	Wireless sensor network Application
	Mayor Shetty	4AL15CS084			
	Tusharpoojary	4AL15CS067			
B11.	Priyanka BM	4AL15CS071	Dr.	Automatic driver	IoT

	ShruthiSalian	4AL15CS090	Manjunath Kotari	drowsiness detection system using GSM and Raspberry Pi	Application
	Surekhareddy	4AL15CS097			
	Vinay	4AL15CS106			
B12.	Adarsh MS	4AL15CS002	Mr. Venkatesh	Dynamic video stitching via shakiness removing	Image processing Application
	Chaitra G	4AL15CS023			
	Kumaraswamy	4AL15CS051			
B13.	Ganesh	4AL15CS034	Ms. Shruthi	Sensor based smart dustbin for waste segregation using GSM	IoT Application
	Sursita	4AL15CS039			
	Madhukara	4AL15CS054			
B14.	Yogesh UH	4AL16CS403	Mr. Sushanth M	Video steganography to secure communication using LSB matching revisited algorithm for military application	Network security Research
	Pramod KS	4AL15CS112			
	Sneha K N	4AL15CS091			
	Suraksha RB	4AL15CS096			
B15.	Adithya V Shetty	4AL15CS004	Ms. Reena	Easy surf	Web application
	Algeena carol	4AL15CS007			
	Aditya Naik	4AL15CS115			
B16.	ArcharyaRakshitha	4AL15CS001	Mr. Hemanth Kumar	Smart irrigation	IoT Application
	Kavya rai	4AL15CS049			
	Hema	4AL15CS040			

	Pavithra G	4AL14CS051			
B17.	Geethanjali	4AL15CS035	Ms. Megha	Smart parking system	IoT Application
	Aishitha	4AL15CS015			
	Anushri	4AL15CS012			
	Anusha	4AL15CS011			
B18.	Anu Prakash	4AL15CS010	Mrs. Harshitha	Behavior analysis based on tweets: a classification approach	Machine learning Review
	Chithra	4AL15CS024			
B19.	Aishwarya K	4AL15CS005	Mr. ParikshithNayaka	E bank Log system	Network security Application
	Arjun V	4AL15CS013			
	Bhargavi	4AL15CS020			
	Jeffin	4AL15CS035			
B20.	Arpitha	4AL15CS014	Mrs. MangalaKini	Auto detection of phishing websites using machine learning	Machine learning Research
	Ashrithajain	4AL15CS016			
	Chaithra	4AL15CS022			
	Deekshitha	4AL15CS029			
B21.	PoojaryPrajwal	4AL15CS066	Mr. Sayeesh	The voice of citizen	Web based application
	Sachinpandith	4AL15CS081			
	Sushanth	4AL15CS098			
	Vilasraj	4AL15CS105			
B22.	Poorna	4AL15CS068	Dr. Manjunath Kotari	Water tank monitoring system	IoT Application
	Shraddha	4AL15CS087			
	Sudharshan	4AL15CS094			
	Nishmitha	4AL15CS064			
B23.	Jagdish	4AL15CS042	Ms. Shilpa	Sign language communication	Machine learning Application
	Tejaskajare	4AL15CS047			
	Lalithkumar	4AL15CS053			

	Yathish	4AL15CS018			
B24.	Priyanka SP	4AL15CS072	Mr. VasudevShahpur	Secured data sharing in cloud	Security Application
	ShrideviPrabhu	4AL15CS089			
	Nalini	4AL15CS079			
	Ranjith	4AL16CS401			
B25.	Akshay	4AL15CS037	Mr. VasudevShahpur	Implementation of DNA cryptography in cloud computing	Network security Research
	Adarshpujar	4AL15CS003			
	Ankith	4AL15CS009			
	Vinay S	4AL15CS106			
B26.	Nidhi C	4AL15CS062	Mr. Hemanth Kumar	An android app for mushroom disease detection: A data mining approach	Machine learning Application
	Prajwal S	4AL15CS069			
	Shetty Niketha	4AL15CS113			
	Rakshitha M	4AL15CS078			

Mobile Application Development using Android

8 days National Level workshop on the theme "Mobile Application Development using Android" was organized from 16th January 2019 to 23rd January 2019 by Alva's Institute of Engineering & Technology, Moodbidri, Karnataka with Technical Collaboration of Computer Society of India Student Chapter and Co Sponsored by Dlithe Bangalore.

The formal inaugural function was graced by the presence of our Head of the Department Dr. Manjunath Kotari, Mr. Arun V Rajpurohith Founder Dlithe Bangalore, Mr. Avinash R S Corporate Trainer – Android & Robotics and Certification Course Coordinator Prof. Harish Kunder.

52 CSE students were registered for the course and obtained a Certificate from the Dlithe Bangalore.

Day wise coverage of technical topics are mentioned below:

Day1:

1. Basics of java is refreshed that is required for mobile app development.
2. History of mobile app development, history of Android version, types, usage etc
3. Students experienced installing Android development environment and configured it in the systems
4. Case studies are shared

Day2:

1. Android architecture
2. Dolvic Virtual Machine
3. Android Virtual Devise
4. Android components
5. Core building blocks
6. Android File structure
7. Android widgets such as text view, edit text, button
8. Developed one Login screen with happy and negative scenario
9. Activity and activity lifecycle
10. Activity Communication

Day3:

1. Students have learnt & practiced on various features like

   - Check box
   - Radio Button
   - Toggle Button
   - Radio Box
   - String builder
   - String buffer

2. Small assignment on building a number calculator

Day4:

Topics and Assignments covered on

- Dialog box
- Adapator
- Camera integration
- Video as assignment
- Agile development and explained how they can work on case study using it.

Day5:

Topics and Assignments covered on

1. WebView
2. Internet permission and communication
3. Action Call
4. Android permission
5. Self permission
6. Image Galary
7. Adding of Image to application
8. Autocomplete text view
9. Adopter with inbuilt function

Day6:

Topics and Assignments covered on

1. Android time picker
2. Spinner
3. Zygote
4. Memory management
5. Fragment
6. Fragment Life cycle
7. Fragment transaction

Day7:

1. Fragment Communication
2. Android menus
3. Broadcast
4. Content provider
5. JSON
6. Pending intent
7. SQLite DB

Day8:

1. Backend services and its integration with application
2. Start, Stop, binding of services
3. Assignment on service integration
4. Recap of 8 days program, students writing keywords on board
5. Online feedback from students

Case Studies:

The following case studies are assigned to respective batches. All the case studies are expected to be completed by end of March 2019

1. Grocery shop owner finding it difficult to visit APMC as its far and thus increasing his operational expenditures. He is in need of a simple app for placing his orders through a mobile app
2. Children's between the age of 4-12 are exposed to the internet world, thus watching video's online. Parents wish to have a mobile app which can streamline video related to kids interest and block rest everything
3. Saloon owner wish to have a mobile app for his VVIP customers to block the date with their choices of haircut etc..
4. Your college wish to have a mobile app with all relevant information and updates. Can you build one app?
5. Corporate wants a mobile app to capture minutes of meeting recording and convert that as report and send it to participant's email
6. Flower shop owner wants a mobile app for accepting the orders from his regular customers and deliver it with delivery confirmation through app
7. Dlithe would like to have a mobile app to collect "e-waste" from the households. A waste ordering/collecting app will help to collect e-waste from the households

Certification Programme 2018-19

Cyber Security

8 days Certification Course on "Cyber Security" was organized from 18th February, 2019 to 25th February 2019 by Department of CSE, Alva's Institute of Engineering & Technology, Moodbidri, Karnataka with Technical Collaboration of Computer Society of India Student Chapter and Co Sponsored by Dlithe Bangalore.

The formal inaugural function was graced by the presence of Managing Trustee Sri. Vivek Alva, Principal Dr. Peter Fernandes, Head of the Department Dr. Manjunath Kotari, Mr. Arun V Raj Purohith, CEO Dlithe Bangalore, Mr. Deepak Bhatt, Information Security Consultant & Trainer, Infosectrain and CSI Student Branch Counsellor Prof. Harish Kunder.

The Resource Person Mr. Deepak Bhatt had given following assignments along with the hand-on training:

- Students are asked to do study on IPV4 addressing and to know how to set their kali Linux repository
- Introduction to Linux File System and Command Line
- Different Phases of Hacking
- Information Discovery
- Scanning
- Gaining Access
- Using Various Methods of Password Cracking
- Hackathon

On the final day, hackathon was conducted for all the participants. Following assignments were given.

- Windows XP hacking (Get the password key from the SAM FOLDER, also get system access) – 10 min
- Windows 7 hacking (Get the password key from the SAM FOLDER) – 20 min
- Troll 2 Machine Hacking (Get the root access) - 20 min
- Hackademic 1 hacking (Get the root and key.txt file inside root) – 30 min

Mr. Deepak (resource person) monitored and judged the students based on their successful completion and time taken to complete

Following were the winners

1. Priyanka, Sneha(Hacked Windows XP, Windows 7, Hacademics, Troll2 (Reached half))

2. Jayaraj ,Druvil (Hacked Windows XP, Windows 7, Hacademics, Troll2 (Reached half))

3. Niharika, Rahul (Hacked Windows XP, Windows 7, Hacademics)

About 70 CSE students were registered for the course and obtained a Certificate from the Dlithe Bangalore.

Hackathon 2018-19

ALVAS HACKATHON-2K19 was an inter collegiate technical event conducted by C-MANIAX forum of Computer Science & Engineering Department, Alva's Institute of Engineering & Technology, Moodbidri in association with CSI Student Chapter. ALVAS HACKATHON 2K19 gathered all the engineering minds of various Engineering colleges all over Karnataka. ALVAS HACKATHON 2K-19 provided the platform to showcase student's coding skills, hacking, web designing, chatbot development and app development abilities and gave them recognition.

ALVAS HACKATHON 2K19 was conducted on 18th February 2019 at AIET Campus. ALVAS HACKATHON 2K19 was inaugurated by Mr. Rakesh Chowdari, Developer @ Synopsis ,Bangalore with the presence of Mr.Vivek Alva, Dr Peter Fernendes, Dr. Manjunath Kotari, Mr. Hemanth Kumar N P ,C-Maniax Members, Faculty Members and Student participants.

There were 125students of different Engineering Colleges who have actively participated in the Hackathon Event.

The list of ALVAS HACKATHON 2K19 Events:

EVENT NO.	EVENT NAME	PARTICIPANTS NO
1	HackerEarth Live Coding	79
2	Ethical Hacking	5
3	Web Designing	18
4	Mobile Application Development	17
5	Chatbot Development	8
		127

Winners list:

Prize	TEAM Member	Event
FIRST	Krishna Katira, AIET Ravish, AIET	HackerEarth Live Coding
SECOND	Kaushik Kotian, SIT, Mangalore	HackerEarth Live Coding
FIRST	Ravish, AIET Adarsh, AIET	Ethical Hacking
FIRST	Jude and group, SNM Polytechnic Moodbidre	Web Designing
SECOND	Shashank and group, AIET	Web Designing

TECHNOFIA'19

Technofia was an inter-collegiate technical fest conducted by C-Maniax forum of Computer Science & Enginering Department, AIET in association with CSI Student Chapter. Technofia gathered all the curious and engineering minds of 13 different Colleges of the various Engineering Colleges of Karnataka. Technofia-19 provided the platform to showcase student's talent and technical abilities and gave them recognition.

Technofia-19 was conducted on 14th& 15thMarch 2019 AT AIET main campus. Technofia-19 was inaugurated by Mr. Sheikh Moidin K M, Manager Operations, Expertise Contracting Co. Ltd and with the presence of Mr.Vivek Alva, Dr Peter Fernandes,Dr. Manjunath Kotari, Mr.Hemanth Kumar N P ,C-Maniax members and all the participants from the various colleges.

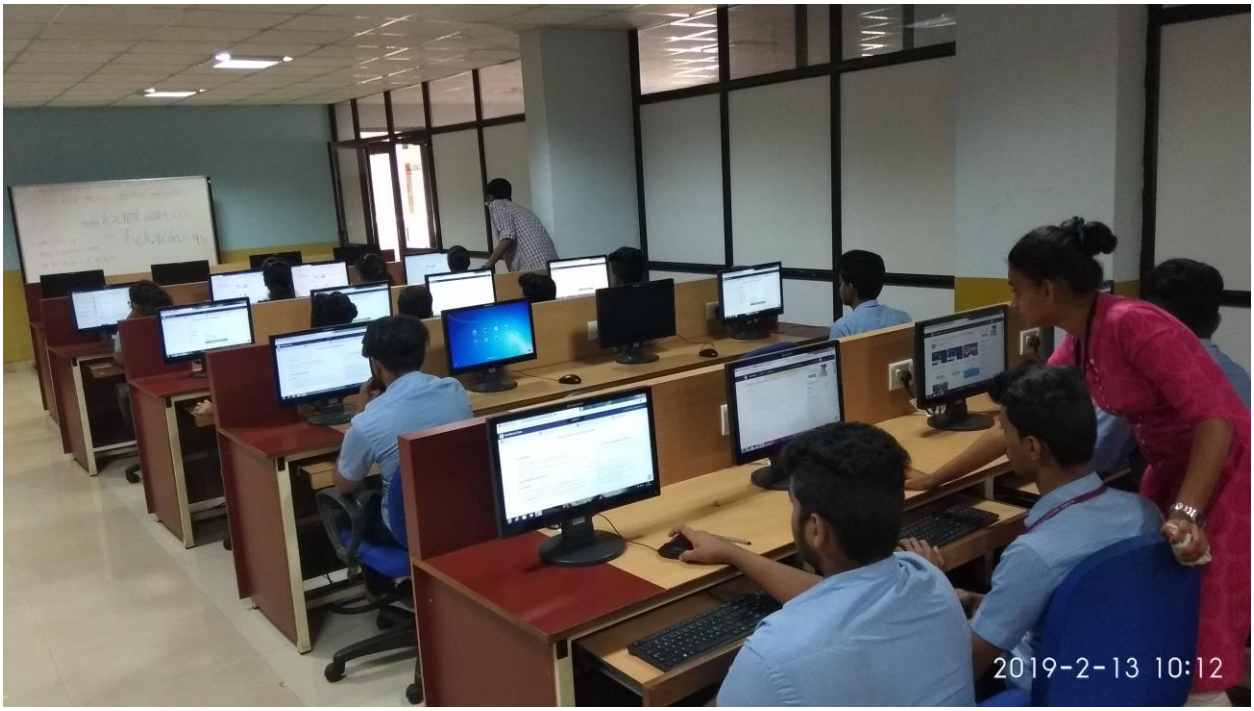
There were 9 events which was a collaboration of both Technical and Semi-Technical Events. Around 400 students from various colleges were took part in various events. About 80 students from 13 different colleges participated in various events.

The Event lists and Winners of Technofia'19:

SL. NO	EVENT LIST	EVENT DESCRIPTION	NO. OF PARTICIPANTS	WINNERS
1	INTIMIDATORS	IT MANAGER (MARKETING)	20 PARTICIPANTS	1ST- AIET 2ND - PACE
- 2	INQUEST	TECHNICAL QUIZ	120 TEAMS	1ST- SNMP 2ND-PACE
3	PAPRIZZA	PAPER PRESENTATION	20 PARTICIPANTS	1ST - AIET 2ND –AIET
4	CODE HUNT	CODING	80 PARTICIPANTS	1ST –AIET 2ND –PACE

5	THE ARCHITECT	WEB DESIGNING	16 TEAMS	1ST- AIET 2ND- PACE
6	GAME BUZZ	GAMING: BLUR PUBG COUNTERSTRIKE	40 TEAMS	1ST-AIET 1ST-AIET 1ST-ALVAS DEGREE
7	BID BIZZ	APTITUDE BIDDING	30PARTICIPANTS	1ST- SDIT 2ND-SIT
8	EUPHOROUS	TECHNICAL DUMCHARADES	80 TEAMS	1ST- PACE 2ND- AIET
9	CYPHER HUNT	TECHNICAL TREASUREHUNT	55 TEAMS	1ST- AIET 2ND- AIET

The organising of Technofia'19 bought a very good bonding among all the four batches of Computer Science branch. The event was a huge success in terms of participation from AIET and other college students. In coming years many more technical and semi-technical events can be added up. Many students from the 1st, 2nd, 3rd and 4th years took the initiative to conduct the particular event with the good participation spirit and with the support of the Management, HOD and Faculties of CSE, AIET.

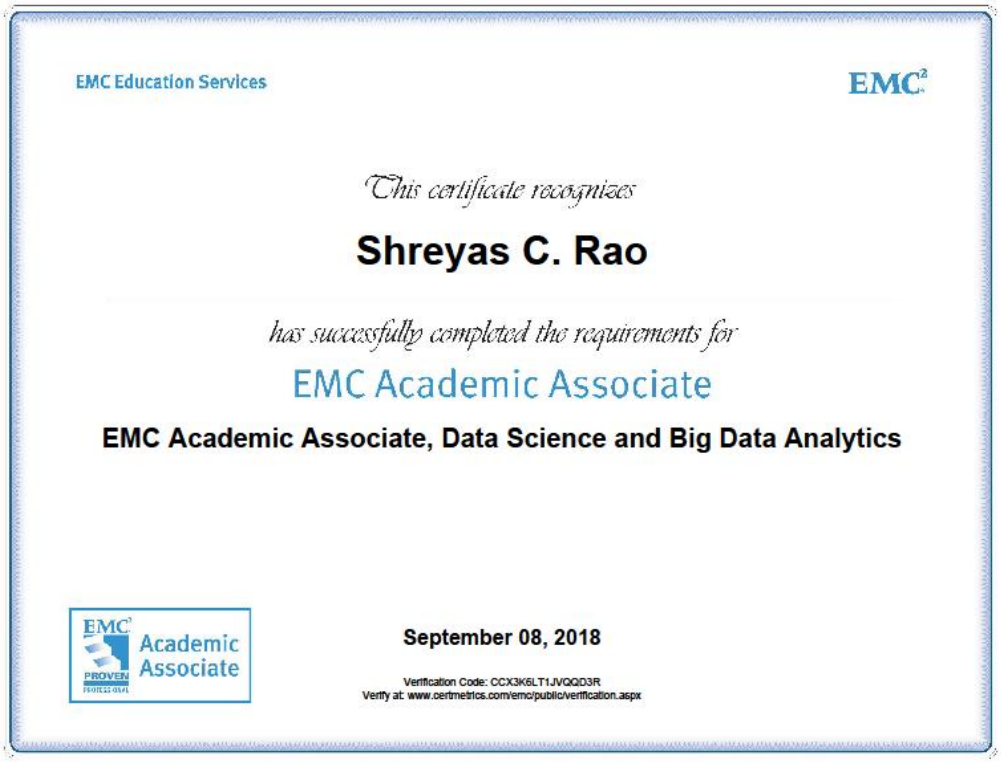

2019-2-13 10:12


2019-2-13 10:11

Dell EMC- Data Science and Big Data Analytics

Department of CSE organized Certification Program on "**Data Science and Big Data Analytics**". The Certification Programme was held during 3rd September 2018 – 8th September 2018. The inauguration of programme was held on 3rd Sept,2018 at Engineering Seminar Hall. This Certification programme was held in association with ICT Academy Chennai and Dell-EMC, Bangalore. Mr. Dineshkumar Gandhi, Sr. Technical Trainer, ICT Academy ,Ms. Fareha Hareem Sr. Trainer Dell-EMC and Mr. Basavadarshan, ICT Academy Relationship Manager were present during inauguration. Mr. Vivek Alva, Managing Trustee inaugurated the Certification programme along with

Dr. Manjunath Kotari, HOD CSE and Resource Persons of the Certification Programme. About 121 CSE students were participated and 81 students successfully Completed DELL-EMC Certification Exam.

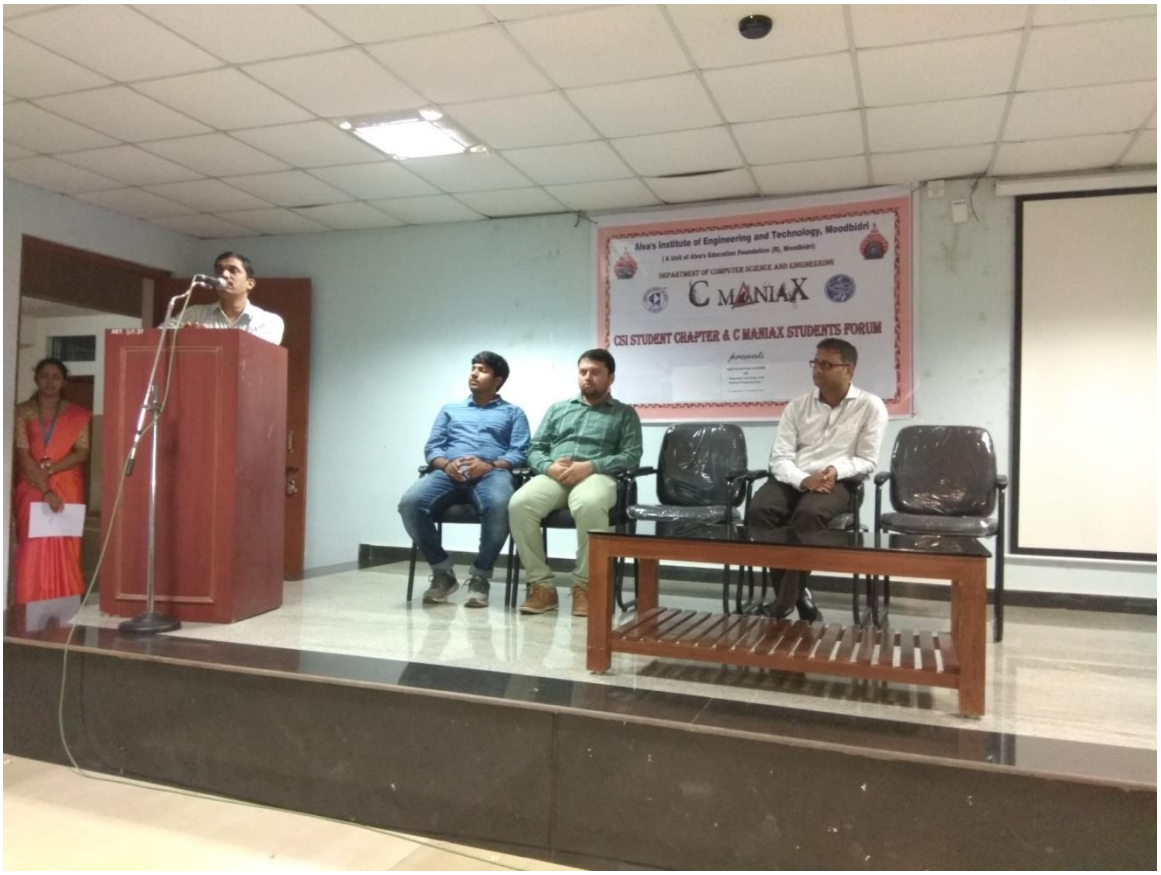


.

Machine Learning using Python Programming

Department of CSE organized Certification Program on "Machine Learning using Python Programming". The Certification Programme was held during 27th August 2018 to 1st September,2018. The inauguration of programme was held on 27th Sept,2018 at Engineering Seminar Hall. This Certification programme was held in association with Dlithe Software, Bangalore. Mr. Arun Rajpurohit and Mr. N.Sridhar Murthy Dlithe Software were the resource persons of the Certification Programme. About 81 CSE students were

participated in this hands-on training session of Machine learning using Python.

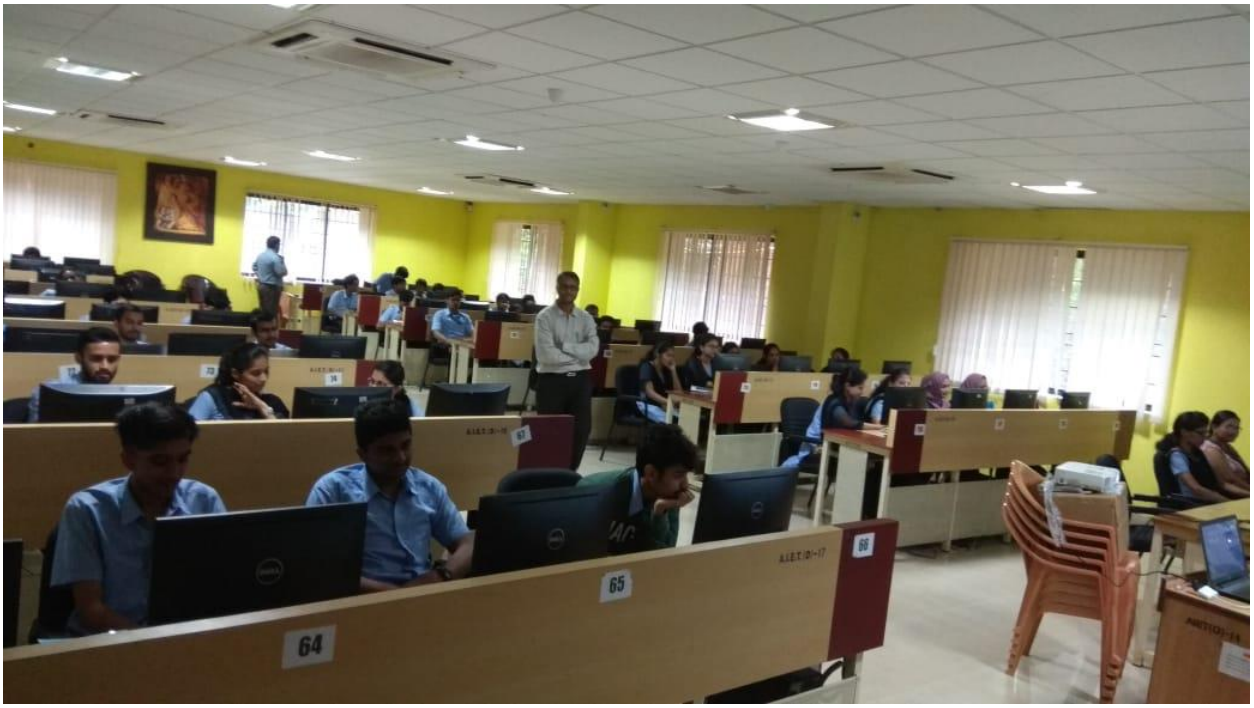


Dlithe have assigned the mini projects to the students to practice Python programming, machine learning during their 7th semester. This will help them to keep them abrupt with technology. Students will also practice agile way of working. Students have learnt using cloud code repositories such as "GIT HUB" and they will use it during project execution.

Dlithe will engage students on fortnightly basis and do on premise review to check the progress. Students are also appraised with Internship report which they must follow and update regularly based on project progress.

The projects belong to the following area: Banking & Finance, Retail, Entertainment / Social Media, Academics, Agriculture

Objective of these project executions is build application that can increase customer experience and optimize operational excellence.



SL#	Problem statement	Batch	Participants	Remarks
1	Postal department in India plays an important role in letter communication. In the digital world, we still see many letters address is hand written	Batch 1	USN: Spoc 4AL15CS113 NIKITHA	The solution can be extended to all courier services companies. Also explore other applicability of text/image processing

	and processing, sorting takes more time. Department would like to have solution for faster sorting, processing of letters.			
2	Police department and Intelligence bureau's always find it difficult to trace thieves, terrorists, rowdy sheeters since they change their appearance and freely roam around. Department would like to nab them using an intelligent system	Batch2	USN: Spoc 4AL15CS051 Kumarswamy	Usually the camera are installed and images are stored. Can you make use of this data set and build AI platform?
3	AIET website is awesome. However, a BOT would add value to increase customer experience and will result into operational excellence. Can you build a BOT for this?	Batch 3	USN:Spoc 4AL15CS048	Use text and voice datasets
4	Bank is experiencing a huge crowd during festival times. Bank manager is confused to take any decisions as the employees are distributed to serve customers with a defined plan. Can you build a platform to solve this problem?	Batch4	USN:	Use sound decibel devise, integrate with Python programming to Analyze the sound patterns and provide a decision making solution
5	Banks, Financial Institutions, Insurance companies always find it difficult when it comes to cheque processing. The difficult part is to match the signature and often cheques gets rejected. On the other side	Batch 5	USN: Spoc 4AL15CS022 Chaitra	The solution can also be useful for fraud prevention

	customer experiencing it hard about the returns. Can you build a platform with AI to match the text with nearest set?			
6	A major retail vendor is introduced many new brands, however he is confused about the future of these brands and modification needed? Can you analyse the companies twitter tweets or feeds and help them to give some decision?	Batch 6	USN: Spoc 4AL15CS055 Megha	This can be applied to many industry segments
7	AIET can be benefitted more if ALEXA can be integrated with college infrastructure and make it functional to use it during inaugural functions like sports, tech, annual etc	Batch 7	USN: Spoc 4AL15CS040/104 Hema R, Varsha S	

Pre Final Year: Below are the assignment to practice during their 5th& 6th Semester

- ✓ Make a web application to predict the customer eligibility for a loan by analyzing the previous data
- ✓ Implement the basic idea of a self driving car using Open CV and Neural networks
- ✓ Create a web tool to predict the stock market by analyzing previous data
- ✓ Design a chat application to give suggestion by analyzing the user previous messages
- ✓ Create a home security system by analyzing the patterns of a persons movement in home using OpenCV or sensors
- ✓ Build an application to predict diabetics by analyzing the test report of a patient
- ✓ Develop a system to unlock the door by using facial recognition and facial expression recognition

Workshops & Training for Students 2018-19

Workshop on "Hadoop for Big Data Analytics"

Department of CSE organized workshop on "Hadoop for Big Data Analytics" in association with CSI student chapter for the final year students during 12th March to 19th March,2019. The Workshop was inaugurated by Mr. Manjunath Mulimanni, Research Scholar, NITK, Surathkal , Dr. Manjunath Kotari HOD CSE and Prof. Jayathkumar Rathod, HOD ISE. The 97 final years were participated in this workshop.

Hadoop is 100% open or free source, and pioneered a fundamentally new way of storing and processing data. Instead of relying on expensive, proprietary hardware and different systems to store and process data, Hadoop enables distributed parallel processing of huge amounts of data across inexpensive, industry-standard servers that both store and process the data, and can scale

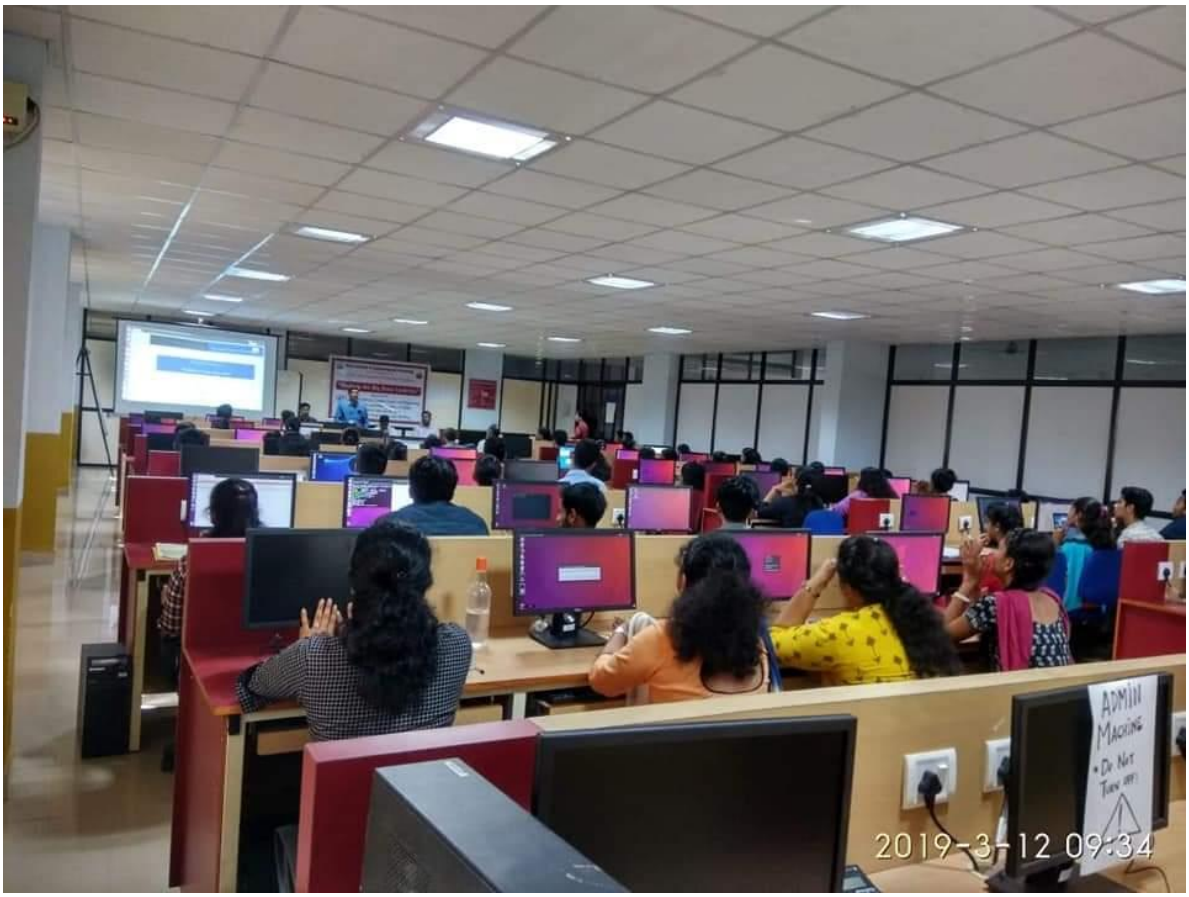
without limits. With Hadoop, no data is too big. And in today's hyper-connected world where more and more data is being created every day, Hadoop's breakthrough advantages mean that businesses and organizations can now find value in data that was recently considered useless.

OBJECTIVE:

To gain the hands on experience in the Hadoop fo Big Data

FEED BACK

The participants learnt how to MapReduce using hadoop concepts. The speaker gave the details of Big Data from the scratch. He explained with good examples. Overall the participants were very happy. They attended the workshop with enthusiasm all the sessions. The workshop was a big hit.



OUTCOMES

The participants got both Theoretical and Practical knowledge about BIGDATA and HADOOP. Planning to setup BIGDATA and HADOOP Lab. More and more research activity are to be planned on HADOOP

RESOURCE PERSON

Mr. Manjunath Mulimani (Research Scholar)
Department: - Computer Science Engineering
Education: - NITK, Surathkal

Workshop on "Let's Latex"

Alva's Institute of Engineering and Technology conducted a 2 days Student development Program on "Let's LaTeX" for Final year students organized by Department of Computer Science and Engineering on 14th and 15th February 2019 in association with CSI student chapter. The workshop was inaugurated by Dr. Manjunath Kothari A, H.O.D, Dept. CSE and also addressed the students. Resource person- Dr. Sumith N, all faculty members and final year students were also present during the inauguration.

Workshop Overview

This workshop imparts a fundamental knowledge required to design and write papers and reports using LaTeX tool. The practical exercises assigned amidst the lecture hours enhanced the interest of students to use the tool for their final year project report.

Course Goal: To master the techniques required to write a professional project report and paper based on the format of the respective publication.

Course Objective

- Learn syntax, features of, and commands to utilize the LaTeX tool.
- Design and write a document using the tool.

Topics covered

- Installing Latex Software
- Latex Environments And Packages
- Document Writing
- Paper Formats
    - IEEE
    - Springer
    - Elsevier Presentation Slides
- Writing Reports
    - Chapters
    - Section

Workshop on "C++ and Java"

Department of Computer Science & Engineering, Alva's Institute of Engineering and Technology conducted a 5 days workshop on "**C++ and Java - an interview based approach and a bridge course for OOC with hands-on sessions**" for **2nd year students** in association with CSI student chapter on 11th to 15th FEB 2019. The workshop was inaugurated Mr. Vivek Alva, Managing Trustee, AEF. The Principal Dr. Peter Fernandes, AIET and Prof. Manjunath Kothari, H.O.D, Dept. CSE and all The HODs of various departments and all staff members and student volunteers were also present during the inauguration function along with the resource person Dr. S. MohideenBadhusha. And also total 123 participants from 2nd Year CSE were participated in this workshop.

Workshop Overview

- Basic fundamentals about c++ and java programming.
- This workshop provided a brief knowledge about object oriented concepts
- This workshop imparts a fundamental knowledge required to design and develop of mini project using object oriented concepts.
- This workshop filled gap between academic and university syllabus.

- The practical programming exercises assigned amidst the lecture hours enhance the interest of development of different real-life applications using c++, java and object oriented concepts.

Course Goal

To master all techniques of software development in the C++ Programming Language and demonstrate these techniques by the solution of a variety of problems spanning the breadth of the language.

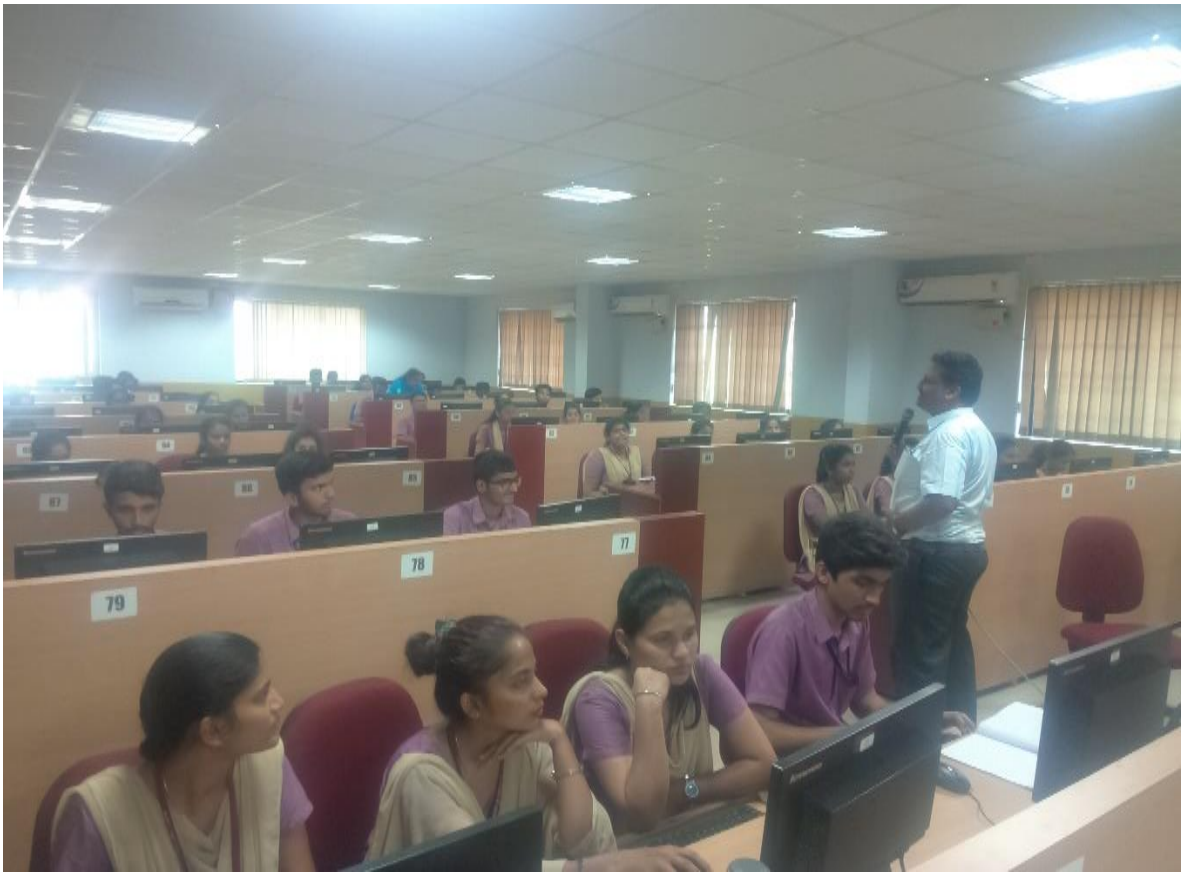
Topics covered

- Intro to Classes and Objects
- Control Structures
- Methods
- Arrays
- Pointers
- Classes
- Inheritance
- Polymorphism
- Templates
- Exceptions
- Files
- STL
- Operator Overloading

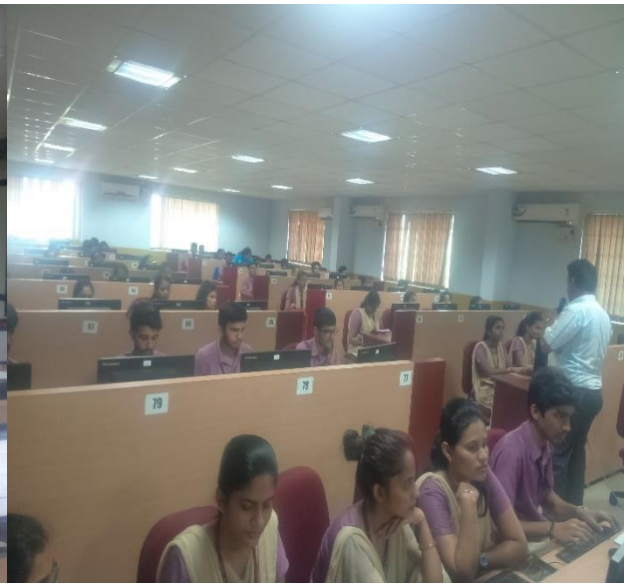
The proceedings of the workshop are as follows:

DAY 1

Session 1: Introduction to object oriented programming paradigm – Understanding of important basic terminologies of OOPs such as Class and objects, constructors, encapsulation, abstraction, Information hiding in C++ with example programs.

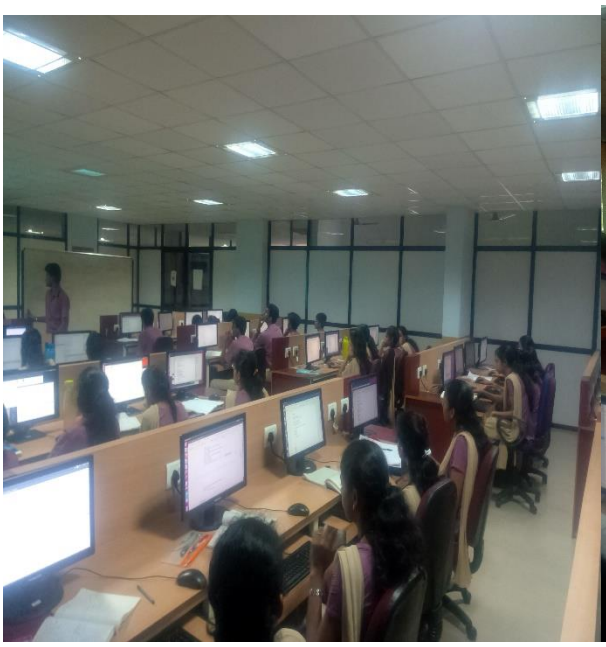
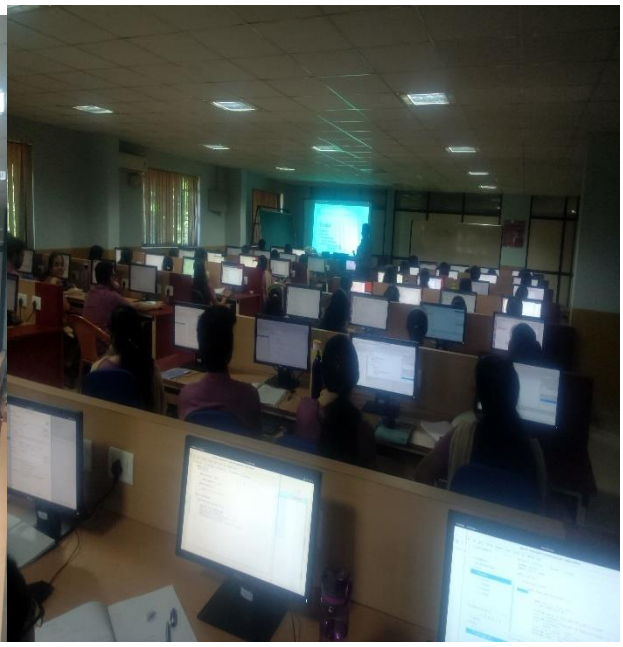


Session 2: Inheritance, types of inheritance, polymorphism, types of polymorphism, dynamic binding, Static binding, Virtual and pure virtual Functions, Abstract class,Templates in C++ with example programs.

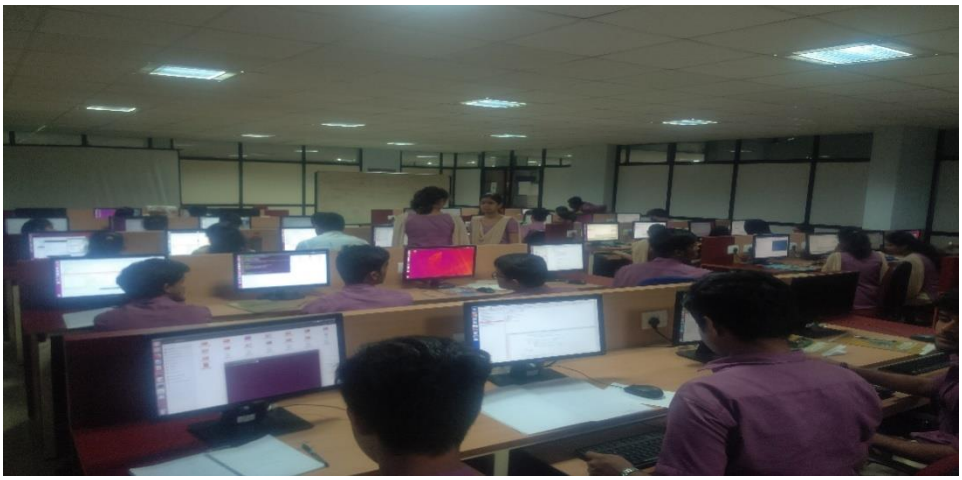


DAY 2

Session 1: File handling functions, Exception handling, In-line functions and Friend function and class in C++ with example programs. Class and objects, constructors, encapsulation, abstraction, Information hiding in Java with example programs.

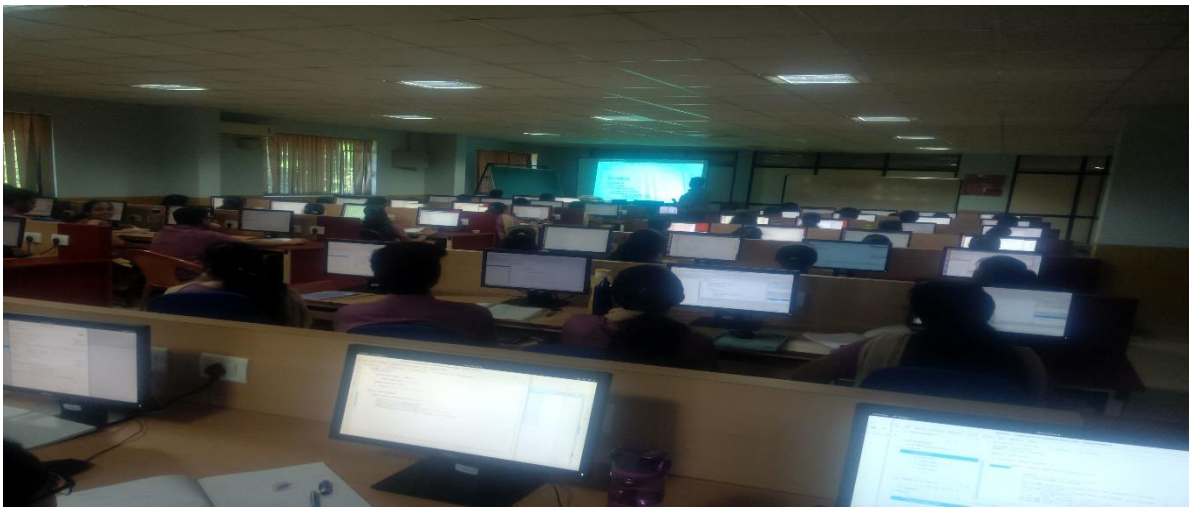
Session 2: Basic operators Logical expression; Type casting; Strings Control Statements: Selection statements, iteration statements, Jump Statements in Java and exercises



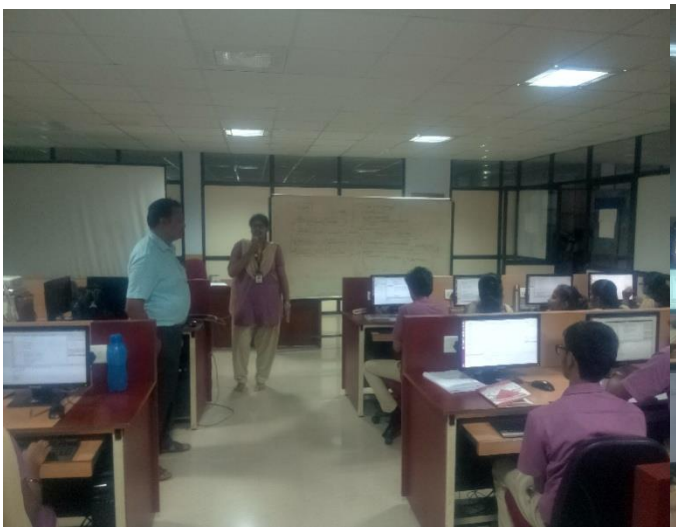
DAY 3

Session 1: Applets,Multi-Threaded Programming, Event Handling and Swings in Java and exercises

Session 2: Practice Session for rigorous training of Interview based questions



End of the session collected oral feedback from the students for the better enhancement of training programs in future.



The day was ended with a valedictory function where all the participants are provided with certificates.

Internship Training Program on Deep Learning

A three weeks Student Internship Program on 'Data Analytics, Machine Learning and Deep Learning' was organized by the Department of Computer Science Engineering, Electronics and Communication Engineering and Information Science Engineering at Alva's Institute of Engineering and Technology, for the students of Alva's Institute of Engineering and Technology

from 15th to 29th January 2019. Dr. Satish Kumar Singh, Associate Professor, Department of Information Technology, Indian Institute of Information Technology - Allahabad and Dr. Mohammed Javed, Assistant Professor Department of Information Technology, Indian Institute of Information Technology - Allahabad were present during inauguration.

The inaugural function commenced with a formal introduction of the dignitaries by Dr. Manjunath Kotari, HOD, Department of Computer Science Engineering, AIET and welcomed the gathering. Dr. Praveen J, Dean Academics, Department of Electronics and Communication Engineering introduced the resource persons. Mr. Vivek Alva, Managing Trustee AIET, Dr. Dattatreya G, Dean Research and Mr. Jayanth Kumar Rathod, HOD, Department of Information Science Engineering was also present in the inaugural function. Mr. Vivek Alva shared his experience about the visit to Indian Institute of Information Technology - Allahabad and briefed about the applications of machine learning and big data analytics and how it has gained its popularity in the recent times. Dr. Satish Kumar Singh delivered his address by stating that machine learning and AI concepts have been in existence since the 1960's but has only recently gained popularity due to advancements in computing and hardware technologies. Dr. Mohammed

Javed, shared his experience he had at Alva's as a student and how it moulded to shapen his career growth. He expressed his views on Big Data Analytics concluding the inaugural session, soon after which the internship sessions followed.

The following topics have been covered by resource persons daywise is as follows.

Date	Resource Person	Topics Covered
15/01/2019	Dr. Satish Kumar Singh	What is and image?, How images are formed? Digital images and biometrics
	Dr. Mohammed Javed	Data Analytics, Different type of tools for big data, An assignment to analyse and install different tools
16/01/2019	Dr. Satish Kumar Singh	Analysis of the biometric and biometric images, Gaussian curve analysis
	Research Scholars	Hands on session on Anaconda

		Navigator tool and Jyupter tools and their working
17/01/2019	Dr. Mohammed Javed	Image processing and its applications, image segmentation, filtering and others concepts
	Research Scholars	Hands on session on the numpy using Anaconda Navigator
18/01/2019	Dr. Mohammed Javed	MAT lab and image processing an Hands on session
	Research Scholars	Students done the Mini projects on the problems stated by Dr. Mohammed Javed to the various groups
19/01/2019	Research Scholars	MAT lab and image processing concepts with hands on session for segmentation, restoration, and etc.
	Research Scholars	MAT lab and image processing concepts with hands on session for, edge detection, object detection and etc.
21/01/2018	Prof. Shekhar Verma	Deep Learning Concepts, TensorFlowand TensorFlow library
	Dr. Krishna Pratap Singh	Training and Testing of Image procession and PytorchPackage installation and edge detections
22/01/2019	Prof. Shekhar Verma	Concepts of Supervised learning, unsupervised learning
	Dr. Krishna Pratap Singh	Concepts of Reinforced learning and semi supervised learning
23/01/2019	Prof. Shekhar Verma	Semi-supervised learning(SSL), Markov Decision Processes (MDP)

		Policy Future Return, Discounted Future Return , Deep Q-Network (DQN)
	Dr. Krishna Pratap Singh	Self-Training, Generative Models, S3VMs, Graph-Based Algorithms, Multi-view Algorithms
24/01/2019	Prof. Shekhar Verma	Random number generations, finding the distance programs and its executions
	Dr. Krishna Pratap Singh	K-Near and finite array , Graphical representation of KNN
25/01/2019	Prof. Shekhar Verma	Regression, Classification, Clustering, Under-fitting and OverfittingOptimization
	Dr. Krishna Pratap Singh	Linear Regression for Machine Learning, ReRegularizationgression Model Representation, Gradient Descent,

The valedictory program of the Internship was held on 29th Jan,2019.

Technical Talk on the topic

"Digital Revolution in India"

***DATE & VENUE**: 16/03/2019 at Engineering Seminar Hall*

Resource Person: Mr. Gautham Bhat, Senior Technical Staff Member and Associate Director with IBM GTS's Lab, Bengaluru

Mr. Gautham Bhat is a Senior Technical Staff member and Associate Director with IBMs GTS's Lab. He explained how the Information Age (also known as the Computer Age, Digital Age, or New Media Age) is a historic period in the

21st century characterized by the rapid shift from traditional industry that the Industrial Revolution brought through industrialization, to an economy based on information technology. Central to this revolution is the mass production and widespread use of digital logic circuits, and its derived technologies, including the computer, digital cellular phone, and the Internet These technological innovations have transformed traditional production and business techniques. Digital technology is a base two process. Digitized information is recorded in binary code of combinations of the digits 0 and 1, also called bits, which represent words and images. Digital technology replaced analog signals for many telecommunication forms, particularly cellular telephone and cable systems.

He explained about how long has the technology is been around. Acheulean stone technology 1.6 million years ago (hand axe) Fire creation and manipulation, used since the Paleolithic, possibly by Homo erectus. He explained about the different technologies in the current what industry is expecting like block chain, artificial intelligence, fuzzy logic, data analytics. AI has immense potential to ease and enrich human life. It can eliminate the need of human involvement in tasks that pose threat to their life and safety. One of the most high risk situation in Defense, Reconnaissance missions,

would need not use human actors anymore soon enough, when we develop sufficiently intelligent Autonomous Drones. Something as simple as a Google search employs Artificial Intelligence algorithms, to bring personalized search results to users. Autonomous Weapons and Autonomous Drones are being researched globally, to reduce risks to human lives in Defense and Reconnaissance.

He explained about block chain like Banking and technology are very closely associated and innovations have changed banking drastically over the period of time. The digital innovations in the banking sector started with the introduction of money that replaced the barter system and then the gradual replacement of wax seal with digital signatures. One such disruptive innovation which is changing the banking sector globally is Blockchain Technology (BCT). Blockchain is shared distributed ledger which stores business transaction to a permanent unbreakable chain which can be viewed by the parties in a transaction. Blockchain technology has the potential to disrupt the financial business applications as it provides permanent and tamper proof recording of transactions in a distributed network.

Technical Talk on the topic

"Intel Software Tools"

***DATE & VENUE**: 11/03/2019 at Engineering Seminar Hall*

Resource Person: Mr. Hemanth, Senior Software Engineer, Intel, Bengaluru..

Mr. Hemanth Kumar is an Software Engineer in Intel Software. He explained about the Intel Distribution of Python, Intel Optimized Tensorflow, Intel optimized Caffe, Intel Media SDK, Intel OpenVINO toolkit.

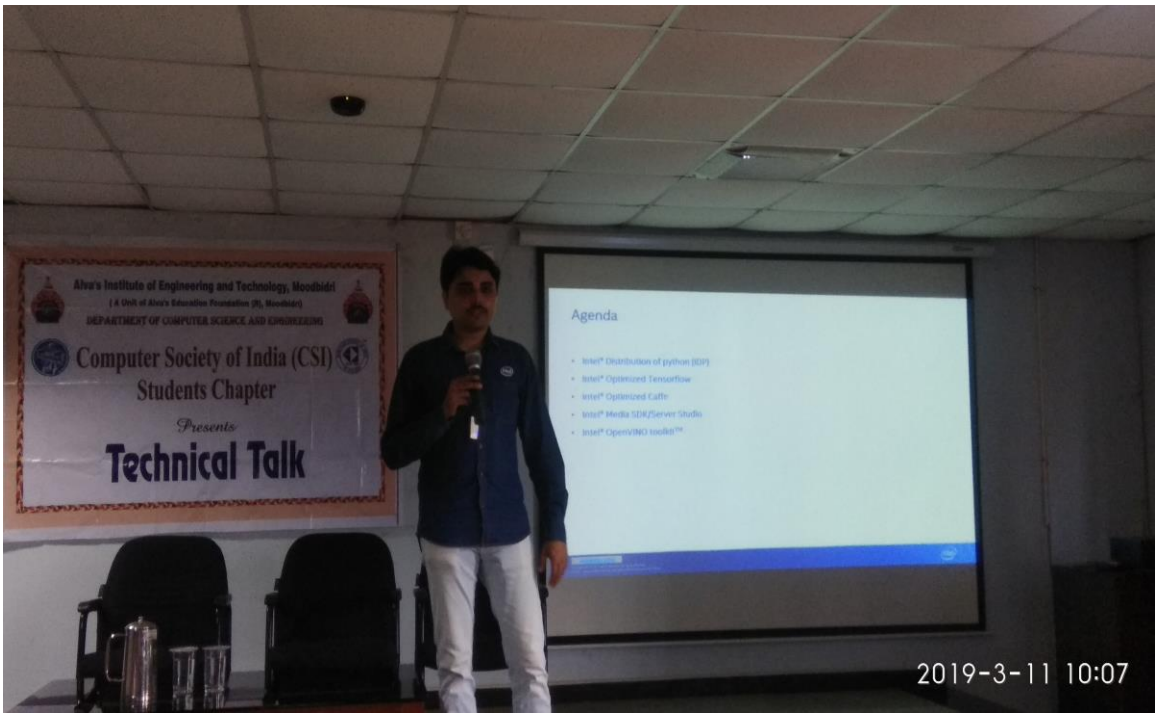
He started explaining about Intel Distribution of Phtyon, Intel® Distribution for Python* is a binary distribution of Python interpreter and commonly used packages for computation and data intensive domains, such as scientific and engineering computing, big data, and data science. The product supports Python 2 and 3 for Windows, Linux, and macOS. The

product simplifies Python installation by providing packages in a binary form so that everything is preconfigured and no compilation tools are needed, as well as contains all the dependences for running on popular OS platforms. Python packages have been accelerated with Intel® Performance Libraries, including Intel® Math Kernel Library (Intel® MKL), Intel® Threading Building Blocks (Intel® TBB), Intel® Integrated Performance Primitives (Intel® IPP), and Intel® Data Analytics Acceleration Library (Intel® DAAL). The packages have been optimized to take advantage of parallelism through the use of threading, multiple nodes, and vectorization.

He also explained about the Artificial Intelligence in Intel. An AI accelerator is a class of microprocessor or computer system designed as hardware acceleration for artificial intelligence applications, especially artificial neural networks, machine vision and machine learning. Typical applications include algorithms for robotics, internet of things and other data-intensive or sensor-driven tasks. They are often manycore designs and generally focus on low-precision arithmetic, novel dataflow architectures or in-memory computing capability. A number of vendor-specific terms exist for devices in this category, and it is an emerging technology without a dominant design. AI accelerators can be found in many devices such as smartphones, tablets, and computers all around the world. I is bringing new ways to use massive amounts of data to solve problems in business and industry—and in high performance computing (HPC). AI applications increasingly take on day-to-day use cases, HPC practitioners—like their commercial counterparts—are looking to move deep learning training off specialized laboratory hardware and software onto the familiar Intel®-based infrastructure already in place for handling a wide variety of HPC workloads.

To enable that workload flexibility, we optimized Intel® Xeon® Scalable processors for HPC and AI. We designed Intel® Omni-Path Architecture (Intel® OPA) fabric to provide high-performance communications across large clusters of Intel® Xeon® Scalable processor-based systems. And we've optimized the most widely applied AI frameworks to take full advantage of processor optimizations and available cores.

Hemanth Kumar explained about Intel Caffe. Caffe supports many different types of deep learning architectures geared towards image classification and image segmentation. It supports CNN, RCNN, LSTM and fully connected neural network designs. Caffe supports GPU- and CPU-based acceleration computational kernel libraries such as NVIDIA cuDNN and Intel MKL and its applications are Caffe is being used in academic research projects, startup prototypes, and even large-scale industrial applications in vision, speech, and multimedia. Yahoo! has also integrated caffe with Apache Spark to create CaffeOnSpark, a distributed deep learning framework.



<u>Technical Talk on the topic</u>

"Moonshot"

DATE & VENUE*: 15/02/2019 at MBA Seminar Hall*

Resource Person: Mr Prithvi G, Senior Engineer, Axiom Research Lab, Bengaluru.

Mr. Prithvi G is an Senior Engineer in Axiom Research Lab which works for the TeamIndus Moon Mission & Systems Overview. He explained about the

mission of the institute and also how the company has established. The Google Lunar X Prize was a competition announced in 2007 that was open to privately funded ventures aimed at inspiring the development of low-cost robotic lunar exploration. The competing craft were required to travel more than 500 metres (1,600 ft) on the lunar surface and transmit high-resolution video and images once there. The TeamIndus' lunar lander platform was code-named HHK1. The team planned a further modification of the HHK1 for other terrestrial and inter-stellar application after the Google Lunar X Prize competition had completed. For the competition, the HHK1 was to deploy the rovers and then operate as the main communication and control unit consisting of payload, propulsion, structural and other sub-systems.

Prithvi explained about the context with respect to the lunar landing, Mission Trajectory, Lunar Orbit Strategy and Lunar descent. A Moon landing is the arrival of a spacecraft on the surface of the Moon. This includes both manned and unmanned (robotic) missions. The first human-made object to reach the surface of the Moon was the Soviet Union's Luna 2 mission.

As TeamIndus company is about to take students for internship Prithvi took test for 47 students and among them 6 students were shortlisted from the first round and they went for second round.

Computer Society of India Student Chapter Activities 2019-20

Three days Inter College Level Workshop on

"Development of Web Oriented Applications using

PHP & MySQL"

27th and 29th June 2019

Organized by,

Department of Computer Science and Engineering

In association with

Computer Society of India (CSI)

For BCA IInd Year Students

Alva's Institute of Engineering and Technology conducted a 3daysworkshop on "**Development of Web Oriented Applications using PHP & MySQL**" for **2nd year BCA students**organized by Department of Computer Science and Engineeringin Association with CSI on 27th to 29th June 2019. The workshop was inaugurated by Sri Vivek Alva, Managing Trustee, AEF. The Principal Dr. Peter Fernandes, AIET and Prof. Manjunath Kothari A H.O.D, Dept. CSE and all The HODs of various departments and all staff members and student volunteers were also present during the inauguration function along with the resource person Dr. S. MohideenBadhusha. And also total 34participants BCA department had been participated in this workshop.

Workshop Overview

- This workshop imparts a fundamental knowledge required to design and develop anon-line management system of client–server technology using dynamic, databasedriven web pages using HTML, PHP and MySQL.

- It provides hands-on training sessions which offer a creative idea in thedevelopment of on-line management systems
- The practical programming exercises assigned amidst the lecture hours enhancethe interest of development of different real-life applications using PHP and MySQLand offers a comprehensive knowledge in the development of on-line managementsystem.

Resource Person :	**Convener:**	**Workshop coordinator:**
Dr. S.MohideenBadhusha Sr.Professor, Department of CSE, AIET	Prof. Manjunath Kothari H.O.D Department of CSE	Mr Sushant Mangasuli Assistant Professor Department of CSE

Session Coordinators

For 2nd year BCA students: 27th to 29th June 2019.

The following faculties are assigned for evaluation of activities during hands-on sessions. The following faculties had present and also evaluated students performance during sessions.

Venue: Network lab (3rd floor) ISE

Pre-requisite Knowledge/Skills:

Basic programming skill in Logical development with fundamental SQLknowledge.

Course Objective

- Elucidate salient unique features of the server sided programmingscript,PHP
- Analyze the basic programming constructs of PHP and commands inMySQL in perspective of imparting fundamental programmingknowledge using hands-on sessions

DATE	SESSION	FACULTY NAME
DAY 1	09.00 am to 1.00 pm	Prof. Mangala Kini
27/06/2019	2.00 pm to 5.00 pm	Prof. Ankita Shetty
DAY2	09.00 am to 1.00 pm	Prof. Shilpa
28/06/2019	2.00 pm to 5.00 pm	Prof. Reena
DAY3	11.00 am to 1.00 pm	Prof. Vasudev Shahapur
29/06/2019	3.00 pm to 5.00 pm	Prof. Venkatesh Bhat

- Apply the knowledge acquired for the development of web orientedapplications by creating on-line management systems based on clientserver technology.
- Design and develop the on-line web oriented applications by impartinghands-on training sessions

Course Goal

Employer will be convinced that your knowledge is beyond the basic Web design technologies. PHP and MySQL is for seasoned Web Designers and Developers who wish to create dynamic and interactive web sites with the ecommerce capabilities.

Benefits of the PHP & MySQL for Beginners

- Demonstrates a working knowledge of Dynamic Web Site Design and Publishing

- Confirms commitment to profession
- Offers a career differentiator, with enhanced credibility and marketability
- Takes students beyond basic user's knowledge to the IT Pros who know how to create web sites

Student Assessment Criteria

Assessments	percentage
All session exercises	50%
Mini project	50%
Final	100%

Workshop Schedule

Day	**Session**	**Portions/ Activities**	**Duration**
DAY 1 **27/6/19**	**session 1**	Lecture and Demonstration on HTML& CSS tags and its controls	**9 a.m to 11 a.m**
	session 2	Hands-on training with the exercises in HTML &CSS tags and its controls	**11.15 a.m to 1.00 p.m**
	session 3	Demonstration on Salient features& basic programming constructs of PHP	**2 p.m to 3.30 p.m**
	session 4	Hands-on training on Salient features& basic programming constructs with the exercises in PHP	**3.30 p.mto 5p.m**
DAY 2 **28/6/19**	**session 1**	Demonstration on application basic programs of PHP and HTML controls	**9 a.m to 11 a.m**
	session 2	Hands-on training with the exercises in the application basic programs of PHP and HTML controls	**11.15 a.m to 1.00 p.m**
	session 3	Demonstration on application	**2 p.m to 3.30**

		advanced programs of PHP and HTML controls	**p.m**
	session 4	Hands-on training with the exercises in the application advanced programs of PHP and HTML controls	**3.30 p.mto 5p.m**
DAY 3	**Session 1**	**(Mini Project)**	
		Development of Mini Project work	**9 a.m to 11 a.m**
29/6/19	**session 2**	**using PHP, HTML and CSS**	**11.15 a.m to 1.00 p.m**

The proceedings of the workshop are as follows:

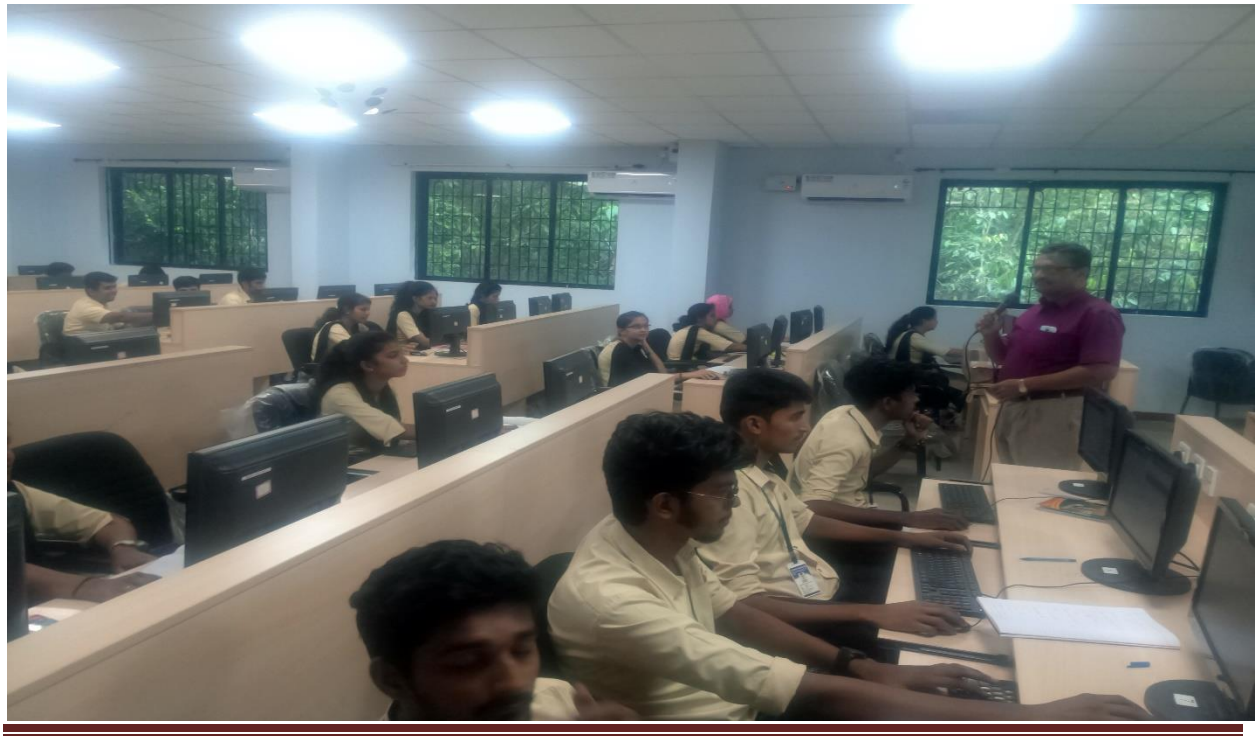
DAY 1

Workshop was inaugurated by Dr. Manjunath Kothari, H.O.D Department of CSE and Resource Person Dr. S. MohideenBadhusha.

Then the Sessions of the workshop started as per time table

session 1 Lecture and Demonstration on HTML& CSS tags and its controls

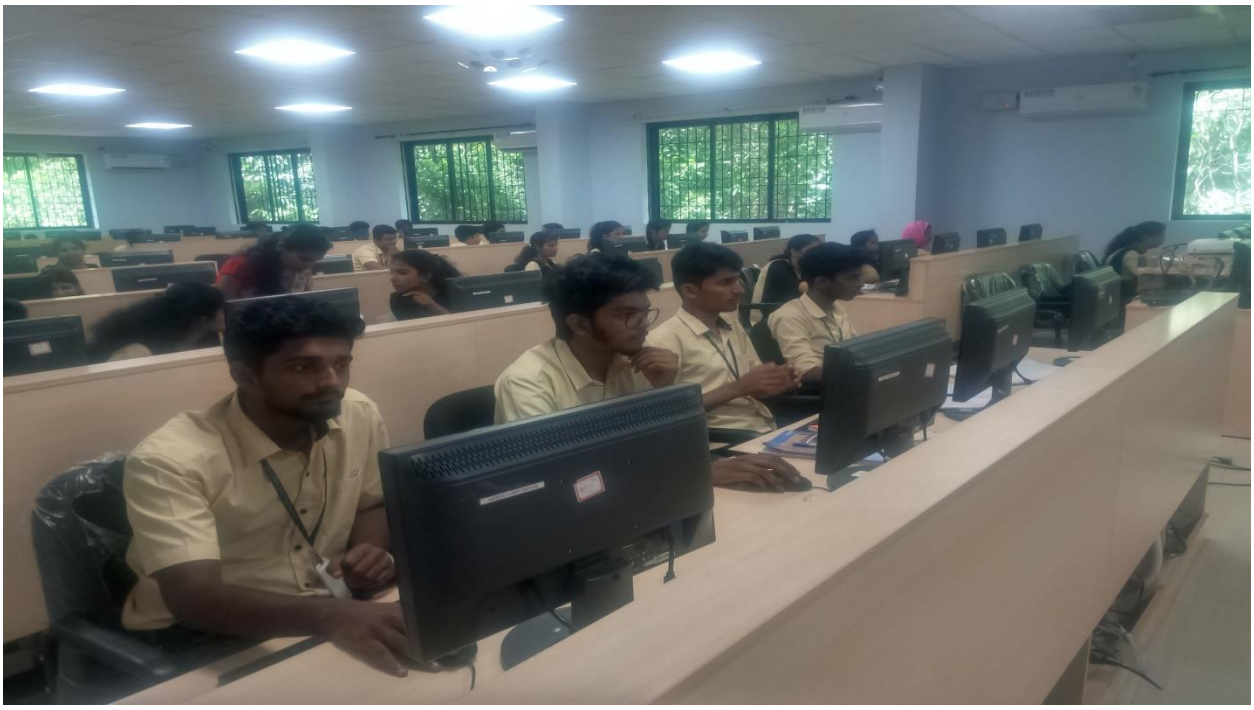
session 2 Hands-on training with the exercises in HTML & CSS tags and its controls



Day 1

session 3 Demonstration on Salient features& basic programming constructs of PHP

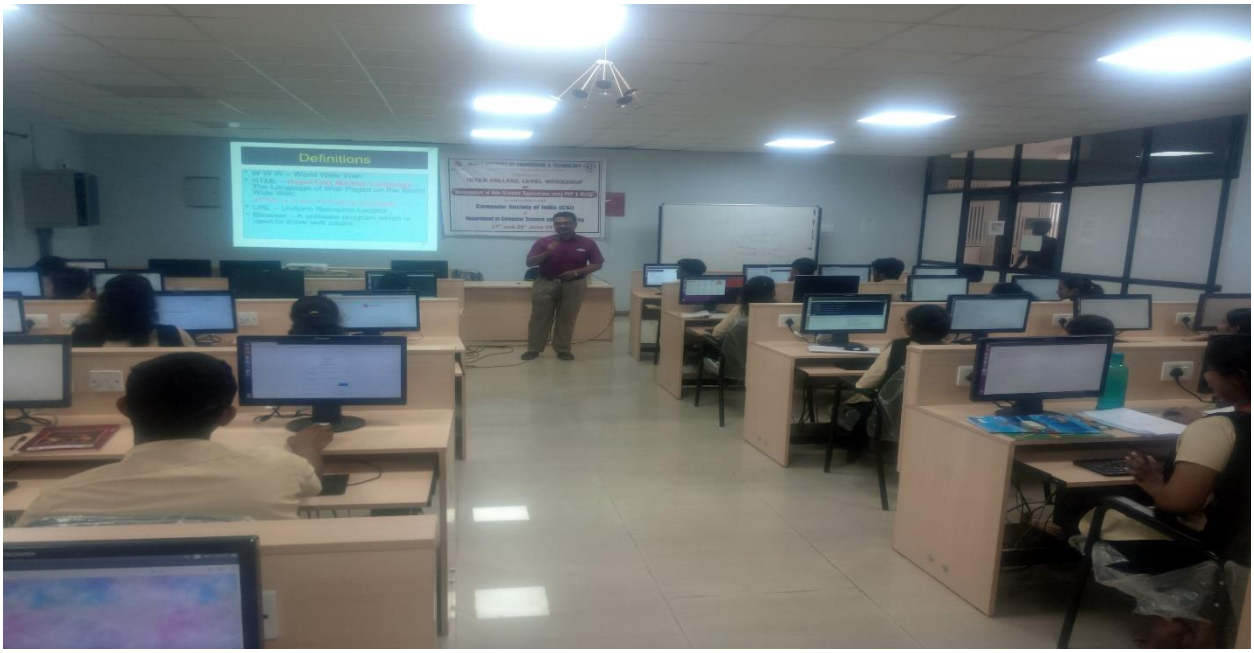
session 4 Hands-on training on Salient features& basic programming constructs with the exercises in PHP



Day 2

session 1 Demonstration on application basic programs of PHP and HTML controls

session 2 Hands-on training with the exercises in the application basic programs of PHP and HTML controls



Day 2

session 3 Demonstration on application advanced programs of PHP and HTML controls

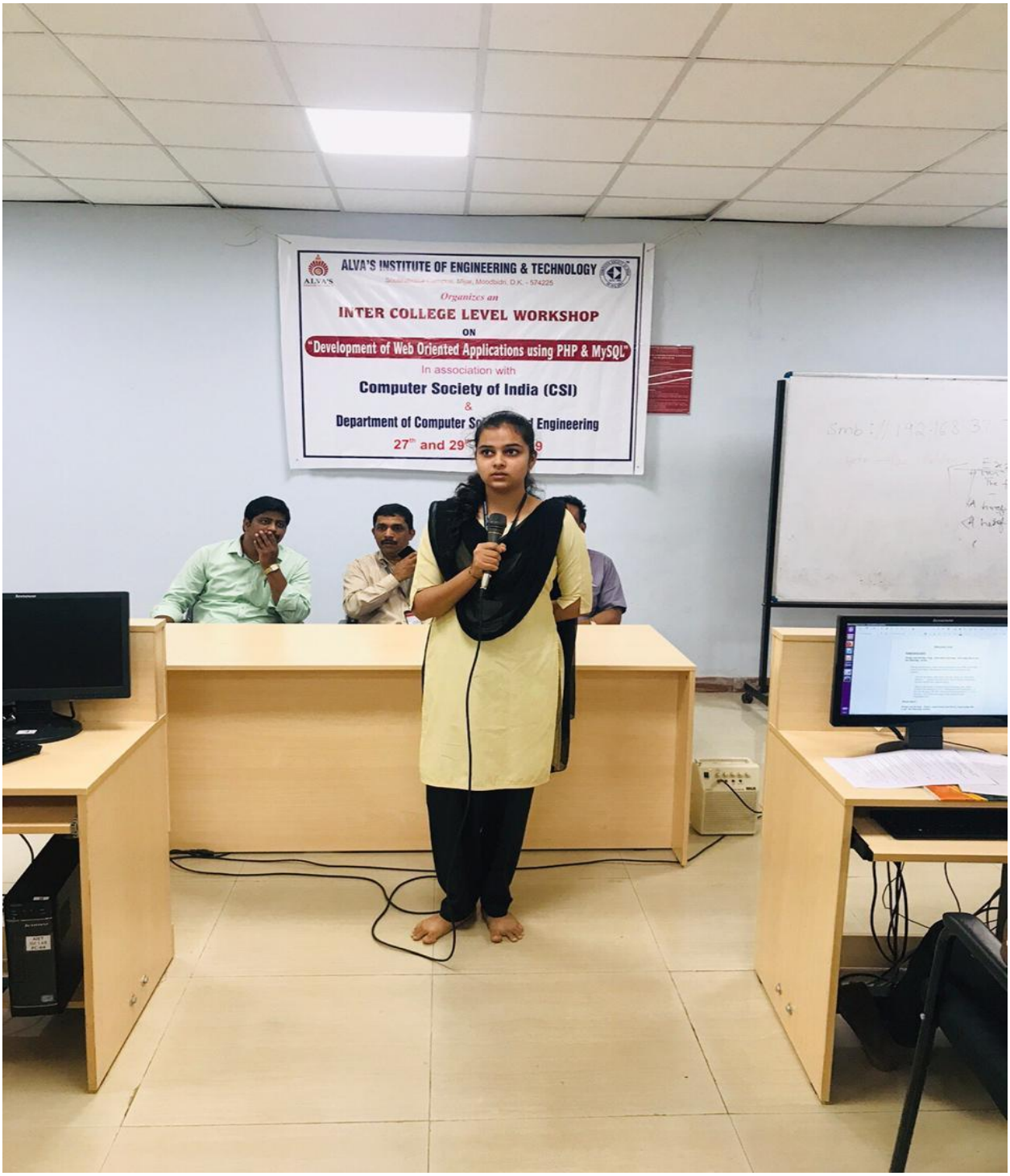
session 4 Hands-on training with the exercises in the application advanced programs of PHP and HTML controls

Day 3

Session 1 and Session(Mini Project)

Development of Mini Project work using PHP, HTML and CSS and also evaluation has been done by evaluation Coordinators.

End of the session collected oral feedback from the students for the better enhancement of training programs in future.



The day was ended with a valedictory function and even was narrated by Ms. Megha Hegde and Mrs. Mangala Kiniand also Dr. Manjunath Kothari H.O.D Department of CSE and Dr. S. MohideenBadhusha given orientation and final

words to students regarding workshop and also all the participants are provided with certificates.

Workshop Evaluation Report

Rubrics for Evaluation

The following are the parameters and criterion to evaluate the performance of the students in the innovation lab classes. The faculy members evaluate the students by considering their performance in Innovation Lab as A,B,C and D experiments. Your score will be determined using the following rubric. The criteria for the grades are given as follows

Category	Criterion	Excellent (A) (4 pts)	Good (B) (3 pts)	Fair (C) (2 pts)	To be improved (D) (1 pt)
Initiation & completion of Exercises With Time management	Read and understand the problem; Start the experiment promptly; Complete the task by using time wisely.	All aspects are satisfied.	Missing one aspect	Missing two aspects	Missing any three or more aspects.
Quality of work	Correct the bugs by themselves; Be able to follow the instruction; complete all assigned tasks.				
Observation & problem solving skills	Make careful observations; clear Demonstration of data; provide useful new ideas; self-reliance in solving the given Exercises.				
Understanding of concepts and the applications	Fully involved in the writing and execution of the programs ;Understanding application of the concept.				

Excellent student will

Lab preparation & time management
Ask for clarification of lab manual readings before the experiment begins.
Be present at the beginning of class and promptly begin the necessary tasks.
Have a clear overview of the tasks to be accomplished and the order in which the tasks should be done, if asked by the instructor.

Quality of work
Follow oral and written instruction correctly.
Ask for clarification of instructions not understood.
Use the equipment in the intended way or in creative ways that neither harm the equipment nor endanger people.
Finish the assigned tasks completely, accurately and well documented.

Understanding of materials & problem solving
Make as precise and accurate observations, as possible with the equipment, for the task at hand.
Present data tables and graphs that are clear to the reader with the axes or headings labeled with proper units.
Provide new ideas or insights concerning the problem at hand or for the use of the equipment.
Solve experimental problems as they arise, safely and with no oversight by the lab instructor.

Team work & safety
Consciously divide and assign tasks to be accomplished (equipment manipulation, data collection, etc.) before class.
Consciously rotate roles between equipment manipulation, data collection, etc.
Be able to articulate what may be a safety concern, if asked.
Follow safety instructions.
Leave the area cleaned up at the end of class.

Poor student will

Lab preparation & time management
Read the lab manual in class before beginning the experiment.
Come in after the beginning of class or talks and delays beginning the necessary tasks.
If asked by the instructor, have no or only a vague idea of what the tasks are and how to go about them.

Quality of work
Not follow oral and written instruction correctly.
Not ask for clarification of instructions not understood.
Use the equipment in ways not intended way or in ways that will damage the equipment and/or endanger people.
Not finish the assigned tasks, or in a sloppy way, or with little documentation.

Understanding of materials & problem solving
Make observations, but the observations are inaccurate or are not properly reported (no units, wrong units).
Present data tables and graphs that are disorganized and/or hard to interpret and/or are incorrect.
Show little interest in thinking about more than the assigned tasks.
Require repeated instructor help to understand and/or complete the tasks at hand.

Team work & safety
Watch while laboratory partner does all the work.
Do all the work while the laboratory partner watches.
Not be able to articulate what may be a safety concern, if asked.
Does actions that are not safe and violates safety rules or plays around in the lab.
Leave the area a mess at the end of class.

Performance Evaluation Sheet

Day 1: 27th June 2019

Session 1,2,3 and 4

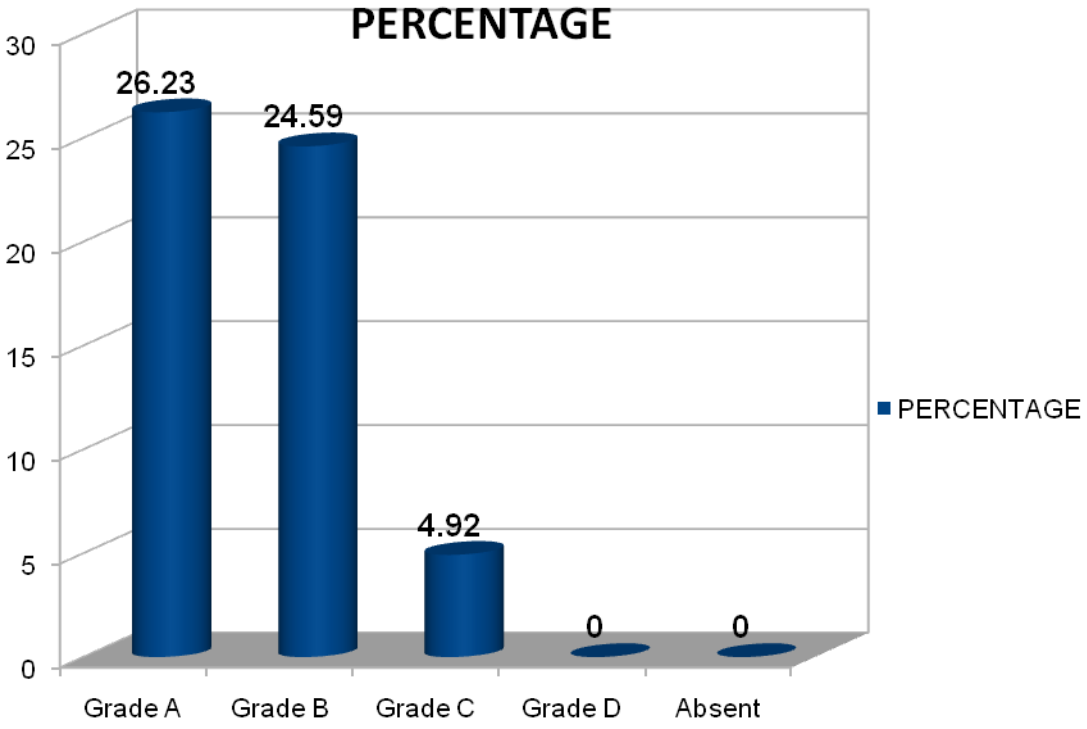
and

Day 2: 28th June 2019

Session 1,2,3 and 4

Sl. No.	USN	Name of the Student	Grade
1	185031935	ABHISHEK GOWDA R M	B
2	185031904	AHAAN R RAO	A
3	185031936	AKSHATHA UDUPA	B
4	185031901	ALAN NAVIN MENDONCA	B
5	185031905	ALISTER PRINSON CARDOZA	A
6	185031938	ANVITHA	A
7	185031907	CAROL LOBO	B
8	185031909	DEEKSHITHA	B
9	185031910	JENCIL RICHWIN D MELLO	A
10	185031912	MOHAMMAD ISMAIL	A
11	185031913	MOHAMMED BILAL MECCAI	A

12	185031914	MOHAMMED MINHAJ ARIF BAJI	A
13	185031915	MOHAMMED WAHAJ ARIF BAJI	A
14	185031921	SAMANA	B
15	185031923	SHARATH ADIGA	A
16	185031924	SHEIKH MOHAMMED JASEEM	B
17	185031983	SHETTIGAR VAISHNAVI KRISHNA	B
18	185031926	SHREERAKSHA SHETTY	A
19	185031927	SIDDANTHA RAI	A
20	185031929	SINCHANA S	B
21	185031966	SNEHA M	A
22	185031931	SUDHEEKSHA SHETTY	A
23	185031980	ANOOP R SHEKHAR	A
24	185031939	AYEESHAWAFA	C
25	185031941	DEEKSHITHA P	B
26	185031946	MADHU D M	C
27	185031947	MEGHA D	B
28	185031984	SHREYA GORE	B
29	185031985	SHREYA PAI	B
30	185031967	SOUMYA	C
31	185031986	SRINIDHI KULKARNI	B
32	185031968	SRIRAKSHA M	B
33	185031987	SUHAS R A	A
34	185031970	SUSHANTH	A

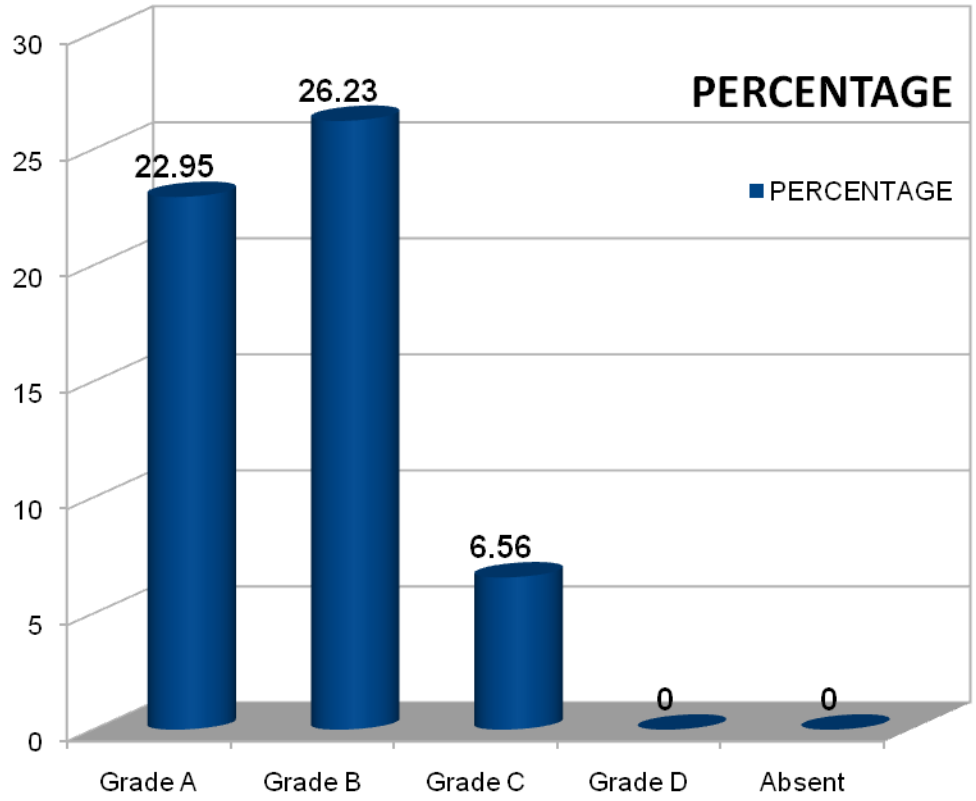


Day 3: 28th June 2019

All Sessions (Miniproject)

Sl. No.	USN	Name of the Student	Grade
1	185031935	ABHISHEK GOWDA R M	B
2	185031904	AHAAN R RAO	B
3	185031936	AKSHATHA UDUPA	B
4	185031901	ALAN NAVIN MENDONCA	B
5	185031905	ALISTER PRINSON CARDOZA	A
6	185031938	ANVITHA	B
7	185031907	CAROL LOBO	B
8	185031909	DEEKSHITHA	B
9	185031910	JENCIL RICHWIN D MELLO	B
10	185031912	MOHAMMAD ISMAIL	A
11	185031913	MOHAMMED BILAL MECCAI	A
12	185031914	MOHAMMED MINHAJ ARIF BAJI	A
13	185031915	MOHAMMED WAHAJ ARIF BAJI	A

14	185031921	SAMANA	A
15	185031923	SHARATH ADIGA	A
16	185031924	SHEIKH MOHAMMED JASEEM	A
17	185031983	SHETTIGAR VAISHNAVI KRISHNA	B
18	185031926	SHREERAKSHA SHETTY	A
19	185031927	SIDDANTHA RAI	A
20	185031929	SINCHANA S	B
21	185031966	SNEHA M	B
22	185031931	SUDHEEKSHA SHETTY	B
23	185031980	ANOOP R SHEKHAR	A
24	185031939	AYEESHAWAFA	B
25	185031941	DEEKSHITHA P	C
26	185031946	MADHU D M	C
27	185031947	MEGHA D	A
28	185031984	SHREYA GORE	B
29	185031985	SHREYA PAI	C
30	185031967	SOUMYA	B
31	185031986	SRINIDHI KULKARNI	B
32	185031968	SRIRAKSHA M	C
33	185031987	SUHAS R A	A
34	185031970	SUSHANTH	A



FEEDBACK ANALYSIS

Inter ColLege Level Workshop: Development of Web Oriented Applications using PHP & MySQL

Resource Person: Dr. S. MohideenBadhusha

Date:11th, 12th ,13th Feb 2019

Participants: BCA 2nd Year Students

TOTAL FEEDBACK FORMS RECEIVED:34

Q. Number	**Option 1 NOT AT ALL**	**Option 2 SOME WHAT**	**Option 3 VERY MUCH**

Workshop Content	**0**	**6**	**62**
Workshop Design	**0**	**13**	**89**
Workshop Facilitator	**0**	**12**	**158**
AVG	**00 /550 = 00.00%**	**31/ 340 = 9.11%**	**309/ 340= 90.88%**

Out of **34** students **90.88 %** of students given very good feedback and **9.11 %** had given moderate feedback.

Two days National Level Workshop on

"Applications of Python Programming in Data Analytics and Machine Learning- Research Perspective"

4th and 5th July 2019

Organized by,

Department of Computer Science and Engineering

In association with

Computer Society of India (CSI)

ಆಳ್ವಾಸ್: ಪೈಥಾನ್ ಪ್ರೋಗ್ರಾಮಿಂಗ್ ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದ ಕಾರ್ಯಗಾರ

ಮೂಡುಬಿದಿರೆ: ಎಂಜಿನಿಯರಿಂಗ್ ವಿದ್ಯಾರ್ಥಿಗಳ ಉನ್ನತ ಶಿಕ್ಷಣಕ್ಕೆ ಪೂರಕವಾದ ತರಬೇತಿ ನೀಡುವ ಉದ್ದೇಶದಿಂದ ಆಳ್ವಾಸ್ ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನಲ್ಲಿ ಕಂಪ್ಯೂಟರ್ ಸೊಸೈಟಿ ಆಫ್ ಇಂಡಿಯಾ ಹಾಗೂ ಕಂಪ್ಯೂಟರ್ ಸೈನ್ಸ್ ವಿಭಾಗದ ಸಹಭಾಗಿತ್ವದಲ್ಲಿ 'ಆಪ್ಲಿಕೇಶನ್ಸ್ ಆಫ್ ಪೈಥಾನ್ ಪ್ರೋಗ್ರಾಮಿಂಗ್ ಇನ್ ಡೇಟಾ ಅನಾಲಿಟಿಕ್ಸ್ ಆ್ಯಂಡ್ ಮಷಿನ್ ಲರ್ನಿಂಗ್ಸ್-ರಿಸರ್ಚ್ ಪರ್ಸ್ಪೆಕ್ಟಿವ್' ಎರಡು ದಿನದ ರಾಷ್ಟ್ರೀಯ ತರಬೇತಿ ಕಾರ್ಯಗಾರವನ್ನು ಉದ್ಘಾಟಿಸಲಾಯಿತು.

ಆಳ್ವಾಸ್ ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನ ಪ್ರಿನ್ಸಿಪಾಲ್ ಡಾ.ಪೀಟರ್ ಫರ್ನಾಂಡಿಸ್ ಕಾರ್ಯಾಗಾರ ಉದ್ಘಾಟಿಸಿ ಮಾತನಾಡಿ, ಕಲಿಯುವಿಕೆಯು ನಿರಂತರವಾಗಿದ್ದು ವಿದ್ಯಾರ್ಥಿಗಳು ಪಡೆಯುವ ಸಮಯವನ್ನು ಹೊಸತನ್ನು ಕಲಿಯಲು ಮೀಸಲಿಡಬೇಕು. ಪೈಥಾನ್ ಪ್ರೋಗ್ರಾಮಿಂಗ್ ಕಾರ್ಯಾಗಾರವು ಉನ್ನತ ಶಿಕ್ಷಣಕ್ಕೆ ಮತ್ತು ಬದಲಾಗುತ್ತಿರುವ ತಂತ್ರಜ್ಞಾನಗಳಲ್ಲಿ ನಿರ್ಗಳತೆ ಪಡೆಯಲು ಉತ್ತಮ ಅವಕಾಶ ಎಂದರು. ಸಂಪನ್ಮೂಲ ವ್ಯಕ್ತಿ ಆಳ್ವಾಸ್ ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನ ಡಾ. ಮೊಯ್ದೀನ್ ಬಾಧುಶಾ ಪೈಥಾನ್ ಪ್ರೋಗ್ರಾಮಿಂಗ್ ಅನ್ವಯಗಳ ಮಾಹಿತಿ ನೀಡಿದರು.

ಕಂಪ್ಯೂಟರ್ ಸಯನ್ಸ್ ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥ ಡಾ.ಮಂಜುನಾಥ್ ಕೊಟ್ಟಾರಿ, ಡೀನ್ ಡಾ.ಪ್ರವೀಣ್ ಜೆ. ಉಪಸ್ಥಿತರಿದ್ದರು.

Conducted for All External Participants from Various Institutions, IIIT Allahabad Internship Students and Inhouse Faculties

Alva's Institute of Engineering and Technology conducted a **two days** National Level Workshop on "**Applications of Python Programming in Data Analytics and Machine Learning- Research Perspective**" for **for all external participants from various institutions, IIIT internship students and also inhouse faculties** organized by Department of Computer Science and Engineeringin Association with CSI on 4th and 5th July2019. The workshop was inaugurated by Sri Vivek Alva, Managing Trustee, AEF. The Principal Dr. Peter Fernandes, AIET, Dr. Praveen J Dean (Aca), Prof. Manjunath Kothari, H.O.D, Dept. CSE and all The HODs of various departments and all staff members and student volunteers were also present during the inauguration function along with the resource person **Dr. S. MohideenBadhusha.** And also total 49 participants had been participated in this workshop.

Dr. Peter Fernandes Principal AIET Moodbidri had given a brief about the National Level workshop and also motivated our IIIT students for internship and major projects in data analytics and machine learning.

The event inauguration was published in Vijay Karnataka paper

ಆಳ್ವಾಸ್: ಪೈಥಾನ್ ಪ್ರೋಗ್ರಾಮಿಂಗ್ ರಾಷ್ಟ್ರೀಯ ಮಟ್ಟದ ಕಾರ್ಯಗಾರ

ಮೂಡುಬಿದಿರೆ: ಎಂಜಿನಿಯರಿಂಗ್ ವಿದ್ಯಾರ್ಥಿಗಳ ಉನ್ನತ ಶಿಕ್ಷಣಕ್ಕೆ ಪೂರಕವಾದ ತರಬೇತಿ ನೀಡುವ ಉದ್ದೇಶದಿಂದ ಆಳ್ವಾಸ್ ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನಲ್ಲಿ ಕಂಪ್ಯೂಟರ್ ಸೊಸೈಟಿ ಆಫ್ ಇಂಡಿಯಾ ಹಾಗೂ ಕಂಪ್ಯೂಟರ್ ಸೈನ್ಸ್ ವಿಭಾಗದ ಸಹಭಾಗಿತ್ವದಲ್ಲಿ 'ಆಪ್ಲಿಕೇಶನ್ಸ್ ಆಫ್ ಪೈಥಾನ್ ಪ್ರೋಗ್ರಾಮಿಂಗ್ ಇನ್ ಡೇಟಾ ಅನಾಲಿಟಿಕ್ಸ್ ಆ್ಯಂಡ್ ಮಷಿನ್ ಲರ್ನಿಂಗ್ಸ್-ರಿಸರ್ಚ್ ಪರ್ಸ್ಪೆಕ್ಟಿವ್' ಎರಡು ದಿನದ ರಾಷ್ಟ್ರೀಯ ತರಬೇತಿ ಕಾರ್ಯಗಾರವನ್ನು ಉದ್ಘಾಟಿಸಲಾಯಿತು.

ಆಳ್ವಾಸ್ ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನ ಪ್ರಿನ್ಸಿಪಾಲ್ ಡಾ.ಪೀಟರ್ ಫರ್ನಾಂಡಿಸ್ ಕಾರ್ಯಾಗಾರ ಉದ್ಘಾಟಿಸಿ ಮಾತನಾಡಿ, ಕಲಿಯುವಿಕೆಯು ನಿರಂತರವಾಗಿದ್ದು ವಿದ್ಯಾರ್ಥಿಗಳು ಸಿಗುವ ಸಮಯವನ್ನು ಹೊಸತನ್ನು

ಕಲಿಯಲು ಮೀಸಲಿಡಬೇಕು. ಪೈಥಾನ್ ಪ್ರೋಗ್ರಾಮಿಂಗ್ ಕಾರ್ಯಾಗಾರವು ಉನ್ನತ ಶಿಕ್ಷಣಕ್ಕೆ ಮತ್ತು ಬದಲಾಗುತ್ತಿರುವ ತಂತ್ರಜ್ಞಾನಗಳಲ್ಲಿ ನಿರ್ಗಳತೆ ಪಡೆಯಲು ಉತ್ತಮ ಅವಕಾಶ ಎಂದರು. ಸಂಪನ್ಮೂಲ ವ್ಯಕ್ತಿ ಆಳ್ವಾಸ್ ಎಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜಿನ ಡಾ. ಮೊಯ್ದೀನ್ ಬಾಧುಶಾ ಪೈಥಾನ್ ಪ್ರೋಗ್ರಾಮಿಂಗ್ ಅನ್ವಯಗಳ ಮಾಹಿತಿ ನೀಡಿದರು.

ಕಂಪ್ಯೂಟರ್ ಸಯನ್ಸ್ ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥ ಡಾ.ಮಂಜುನಾಥ್ ಕೊಟ್ಟಾರಿ, ಡೀನ್ ಡಾ.ಪ್ರವೀಣ್ ಜೆ. ಉಪಸ್ಥಿತರಿದ್ದರು.

Workshop Overview

- The workshop imparts a fundamental knowledge in Python required for Data Analytics and Machine Learning with Jupyter Notebook
- The practical programming exercises assigned amidst the lecture hours enhance the interest of solving problems in Data Analytics using python
- It provides hands-on training sessions which offer a basic data structures in Python (List,Tuple,Dictionary & files)
- It provides hands-on training sessions which implements data structures, Data Munging, Manipulation and Exploratory analysis using Pandas
- It finally imparts the knowledge of solving a Case-Study of Data science project and Machine Learning Model using different Python Libraries such as Pandas, Numpy, SkLearn and Matplotlib with Jupyter Notebook
- Development of different real-life applications using PHP and MySQL and offers a comprehensive knowledge in the development of on-line management system.
-

Session Coordinators

All the CSE Department inhouse faculties are assigned for smooth conduction of theory sessions activities during hands-on sessions also in-house faculties evaluated students performance during sessions.

Venue: Network lab (3rd floor) ISE

Prerequisite Knowledge:

- Pre-Linear algebra, Linear Algebra
- Probability theory-Probability and Statisticsand Analysis and Applied Probability
- Calculus
- Multivariate Calculus
- Graph theory
- Optimization methods

- Any programming language that is widely used for ML such as python, MATLAB or C++.

Course Objective

- The workshop imparts a fundamental knowledge in Python required for Data Analytics and Machine Learning with Jupyter Notebook
- The practical programming exercises assigned amidst the lecture hours enhance the interest of solving problems in Data Analytics using python
- It provides hands-on training sessions which offer a basic data structures in Python (List, Tuple, Dictionary & files)
- It provides hands-on training sessions which implements data structures, Data Munging, Manipulation and exploratory analysis using Pandas
- It finally imparts the knowledge of solving a Case-Study of Data science project and Machine Learning Model using different Python Libraries such as Pandas, Numpy, SkLearn and Matplotlib with Jupyter Notebook

Course Goal

Participants will be able to:

- Carry out data analysis/statistical analysis
- Effectively visualize the data using machine learning methods.

Faculty Assessment Criteria

Assessments	percentage
All session exercises	50%
Mini project	50%
Final	100%

Workshop Schedule

Day	Session	Portions/ Activities	Duration
DAY 1 04/07/2019	Session 1 (9.00 am -10.45 am)	Basic data structures in Python (List,Tuple,Dictionary& files) in Jupyter Notebook – Exercises. **Lecture Hour**	1 3/4 Hours
	Session 2 (11.00 am – 1.00 pm)	**Hands-on training**	2 Hours
	Session 3 (2.00 pm -3.15 pm)	Implementations of its data structures, Data Munging, Manipulation, Exploratory analysis using Pandas in Jupyter Notebook **Lecture Hour**	1 1/4 Hours
	Session 4 (3.30 pm – 5.00 pm)	**Hands-on training**	1 1/2 Hours
DAY 2 05/07/2019	Session 1 (9.00 am -10.45 am)	How to develop your data science project?- A case study- using jupyter notebook **Hands-on training**	3 3/4 Hours
	Session 2 (11.00 am – 1.00 pm)		
	Session 3 (2.00 pm -3.15 pm)	How to develop your machine learning model- A case study- using jupyter notebook **Hands-on training**	2 3/4 Hours
	Session 4 (3.30 pm – 5.00 pm)		

The proceedings of the workshop are as follows:

DAY 1

Workshop was inaugurated by Dr. Peter Fernandes Principal AIET Moodbidri, Dr. Praveen J Dean (Aca), Dr. Manjunath Kotari H.O.D Department of CSE, Prof. Jayanth Rathod H.O.D Department of CSE and also Resource Person Dr. S. MohideenBadhusha and also all the external participants were witnessesd inaugural function. The whole event was narrated by Ms. Megha Hegde and Mr. Sushant Mangasuli, Workshop Organizer, Department of CSE


ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodbidri, D.K. - 574225
Organizes an
NATIONAL LEVEL WORKSHOP
ON
Learning- Research Pers
In association w
Computer Society o
&
tment of Computer Science
4th and 5th Ju


NATIONAL LEVEL WORKSHOP
ON
Learning- Research Perspective"
In association with
mputer Society of India (CSI)
&
Computer Science and Engin
nd 5th July 2019
anjunath Kotari

Resource person Introduction had been done by Prof. Mangala Kini Assistant Professor Department of CSE.

Dr. Peter Fernandes Principal AIEtMoodbidri had given guest talk and motivated all participants of this workshop

Then the Sessions of the workshop started as per time table

Day 1

Session 1 Basic data structures in Python (List,Tuple,Dictionary& files) in Jupyter Notebook – Exercises.

Session 2 Hands-on training

Session 3 Implementations of its data structures, Data Munging, Manipulation, Exploratory analysis using Pandas in Jupyter Notebook

Session 4 Hands-on training

Day 2

Session 1 How to develop your data science project?- A case study- using jupyter notebook

Session 2 Hands-on training

Session 3 How to develop your machine learning model- A case study- using jupyter notebook

Session 4: Hands-on training

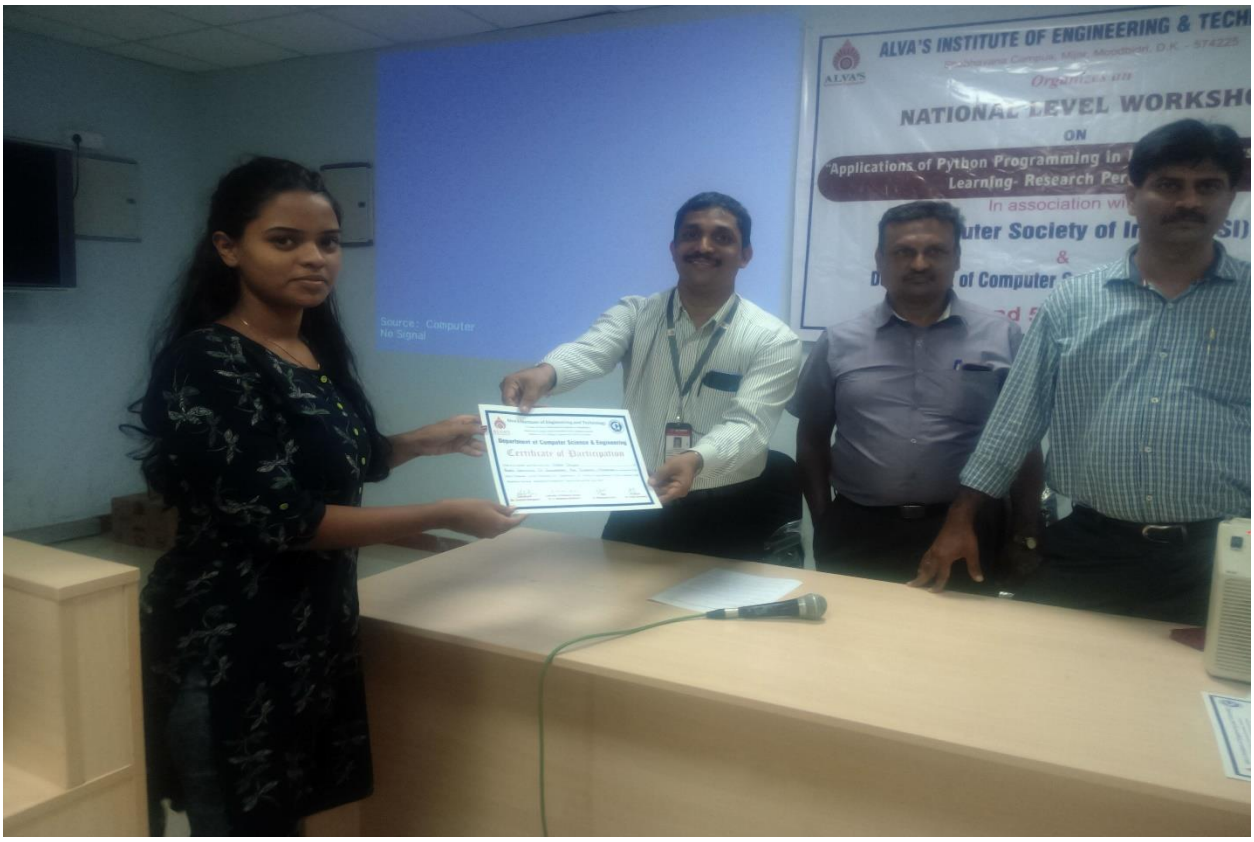
End of the session collected oral feedback from the participants for the better enhancement of training programs in future.

The day was ended with a valedictory function and event was narrated by Ms. MeghaHegde, Mrs. Mangala Kiniand and Mr. Sushant Mangasuliand at the end of the function Dr. Manjunath Kothari H.O.D Department of CSE, Resource Person Dr. S. MohideenBadhushaDepartment of CSE and Dr. Praveen J Dean (Aca) distributed certificates to all the participants. All media persons were also present for the event.


ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Organizes an
NATIONAL LEVEL WORKSHOP
ON


ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Organizes an
NATIONAL LEVEL WORKSHOP
ON
"Applications of Python Programming in Data Analytics and Machine Learning- Research Perspective"


ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Organizes an
NATIONAL LEVEL WORKSHOP
ON
Learning- Research Perspective"
In association with
Computer Society of India
Certificate of Participation


ALVA'S INSTITUTE OF ENGINEERING & TECH
Organizes an
ON
In association wi
Certificate of Participation


ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
NATIONAL LEVEL WORKSHOP
ON


ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Organizes an
NATIONAL LEVEL WORKSHOP
ON
Learning- Research Perspective"
In association with

FEEDBACK ANALYSIS

Two days National Level Workshop on "Applications of Python Programming in Data Analytics and Machine Learning- Research Perspective"

Resource Person: Dr. S. MohideenBadhusha

Date: 4th and 5th July 2019

Participants: External Participants, IIIT Internship Students and All Department Inhouse Faculties

TOTAL FEEDBACK FORMS RECEIVED: 21

Q. Number	Option 1 NOT AT ALL	Option 2 SOME WHAT	Option 3 VERY MUCH
Workshop Content	02	16	24
Workshop Design	0	36	27
Workshop Facilitator	0	17	67
AVG	02 /189 = 1.05%	69 / 189 = 36.50%	118 / 189= 62.43%

Out of **21** students **62.43 %** of students given very good feedback and **36.50%** had given moderate feedback.

Technical Talk-1 on the topic

"ERGONOMICS"

DATE & VENUE*: 22nd August 2019, ENGINEERING SEMINAR HALL*

Resource Person: Mr. Anup Justin, TechTalk Systems, R&D, Bengaluru

Mr. Anup Justin explained about the Ergonomics and its importance initially. It is the process of designing or arranging workplaces, products and systems so that they fit the people who use them. Most people have heard of ergonomics and think it is something to do with seating or with the design of car controls and instruments – and it is… but it is so much more. Ergonomics applies to the design of anything that involves people – workspaces, sports and leisure, health and safety. Ergonomics is a branch of science that aims to learn about human abilities and limitations, and then apply this learning to improve people's interaction with products, systems and environments. Ergonomics aims to improve workspaces and environments to minimise risk of injury or harm. So as technologies change, so too does the need to ensure that the tools we access for work, rest and play are designed for our body's requirements. Ergonomics aims to create safe, comfortable and productive workspaces by bringing human abilities and limitations into the design of a workspace, including the individual's body size, strength, skill, speed, sensory abilities (vision, hearing), and even attitudes.

He explained how ergonomics works. Ergonomics is a relatively new branch of science, but relies on research carried out in many other older, established scientific areas, such as engineering, physiology and psychology. To achieve best practice design, Ergonomists use the data and techniques of several disciplines: anthropometry: body sizes, shapes; populations and variations biomechanics: muscles, levers, forces, strength. Environmental physics: noise, light, heat, cold, radiation, vibration body systems: hearing, vision, sensations. Applied psychology: skill, learning, errors, differences. Social psychology: groups, communication, learning, behaviours.

He briefly explained about the design of ergonomics. Ergonomics is the science of refining the design of products to optimize them for human use. Computers and related products, such as computer desks and chairs, are frequently the focus of ergonomic design.

Finally he explained about the human factors involved in ergonomics. Human factors and ergonomics is concerned with the "fit" between the user, equipment, and environment or "fitting a job to a person". It accounts for the user's capabilities and limitations in seeking to ensure that tasks, functions, information, and the environment suit that user.

To assess the fit between a person and the used technology, human factors specialists or ergonomists consider the job (activity) being done and the demands on the user; the equipment used.

Technical Talk-2 on the topic

"LOCATION INTELLIGENCE USING BEACONS FOR SMART CONNECTED WORLD"

***DATE & VENUE**: 27th August 2019, ENGINEERING SEMINAR HALL*

Resource Person: Mr. Chandrasekhar Kutyar, SangamOne Infotech, Bengaluru.

Mr.**Chandrasekhar Kutyar** explained about the topic location intelligence using beacons for smart connected world. Beacons are small, wireless transmitters that use low-energy Bluetooth technology to send signals to other smart devices nearby. Put simply, they connect and transmit information to smart devices making location-based searching and interaction easier and more accurate.

He explained about what is beacons and how beacons technology works. All new technologies are becoming a part of our environment, but many of them remain unnoticed or incomprehensible. For many people, beacons are one of these mysterious items. Many IoT applications in large industries –such as retail and warehousing – use beacons everyday, but these

small devices go unnoticed. Beacons are small, wireless sensors that are normally placed in a casing. The technology uses Bluetooth Low Energy (also called Bluetooth Smart or Bluetooth Version 4.0+) to broadcast radio signals or, simply put, to communicate with other smart devices.

He also explained that Beacon developers are still struggling with a number of unsolved issues, including designing better antenna shapes and increasing signal distance. Despite this, beacons are increasingly being implemented in many retail IoT solutions, and are projected to extend further into the industrial and healthcare spheres. Finally he also discussed about several beacon use cases.

Technical Talk-3 on the topic

"ARTIFICIAL INTELLIGENCE"

***DATE & VENUE**:1st September 2019, ENGINEERING SEMINAR HALL*

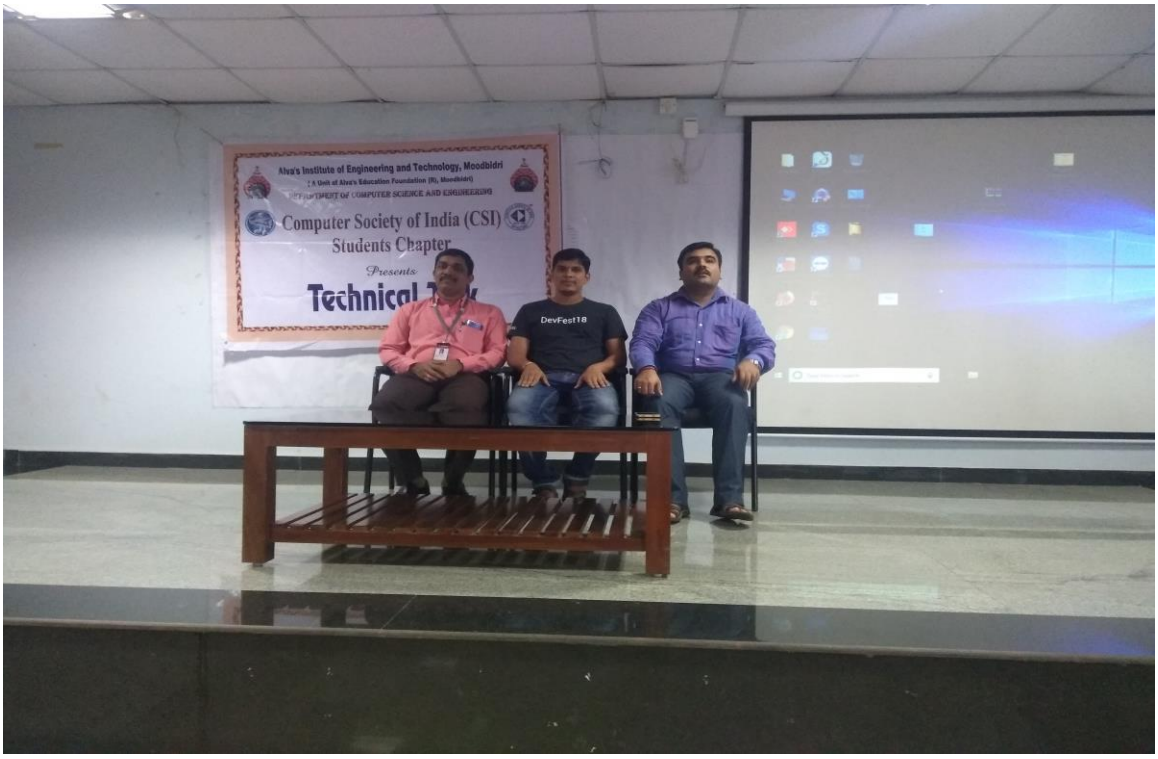
Resource Person: Mr. Raviraj , Data Scientist, Swiss RE, Bengaluru

Mr. Raviraj explained about artificial intelligence and its applications. Initially he explained about the history of AI(Artificial Intelligence) .The history of Artificial Intelligence (AI) began in antiquity, with myths, stories and rumors of artificial beings endowed with intelligence or consciousness by master craftsmen. The field of AI research was founded at a workshop held on the campus of Dartmouth College during the summer of 1956.

He then explained about what is AI and why AI .In today's world, technology is growing very fast, and we are getting in touch with different new technologies day by day. Here, one of the booming technologies of computer

science is Artificial Intelligence which is ready to create a new revolution in the world by making intelligent machines. The Artificial Intelligence is now all around us. It is currently working with a variety of subfields, ranging from general to specific, such as self-driving cars, playing chess, proving theorems, playing music, Painting, etc.AI is one of the fascinating and universal fields of Computer science which has a great scope in future. AI holds a tendency to cause a machine to work as a human. Artificial Intelligence is composed of two words Artificial and Intelligence, where Artificial defines *"man-made,"* and intelligence defines *"thinking power"*, hence AI means *"a man-made thinking power."*

He also explained that With the help of AI, you can create such software or devices which can solve real-world problems very easily and with accuracy such as health issues, marketing, traffic issues, etc.With the help of AI, you can create your personal virtual Assistant, such as Cortana, Google Assistant, Siri, etc.With the help of AI, you can build such Robots which can work in an environment where survival of humans can be at risk.AI opens a path for other new technologies, new devices, and new Opportunities.Finally he explained about goals of AI such as Replicate human intelligenceCreating some system which can exhibit intelligent behavior, learn new things by itself, demonstrate, explain, and can advise to its user.



Technical Talk on the topic

"COMPANY SPECIFIC TRAINING-How To Face Interview"

DATE & VENUE:14TH *September 2019, SEMINAR HALL(CIVIL BLOCK)*

Resource Person: Mr. Hemanth Kumar, Senior Software Engineer,Thought focus,Bangalore

Mr. Hemanth kumar explained about how to face an interview confidently. People feel stressed as they hear about INTERVIEW. Most of them focus only on the questions to be answered in the Interview. But the interview is the test of not only knowledge but behaviour and honesty too. It does not matter where you went to school, the number of degrees you may hold, the experience you have or whom you know. It is important do the interview successfully. It is vital to approach interviews in the correct manner and with the right attitude, as that is the key to success.

He explained about some of the key aspects such as go prepared,on the day of interview and know what not to do.He explained that before Research the Company Do some homework, e.g. Find out about the company's vision, goal, strategy, products, finances, departments, competitive advantages, competitors, the work culture and the management from the website. If the company does not have a web presence look them up at the library, call the Chambers of Commerce, and find out everything you can about them. Make sure you know as much about it as you can, so that you can impress your interviewers and show them how much you care. You should be familiar with whatever is mentioned in the CV. Read it thoroughly so that you're not stumped by any question regarding your past employment and education.Come up with answers to common resume questions.

There are a few things you should avoid at all costs when you go into an interview. Many people don't know that a few innocent comments can actually cause a big red flag to go up for the interviewer. Choose your words carefully and make sure you give an impression of being a respectful, hard worker who is truly excited about the position.


KALI LINUX

Technical Talk on the topic

"Industrial Applications of .NET and Applications of C#"

DATE & VENUE: 5th October *2019, ENGINEERING SEMINAR HALL*

Resource Person Mr.Amarnath V Meti, Software Manager, Infosys, Bengaluru.

Mr. Amarnath Meti briefly explained about the how the language has to be utilized in the project. C# is a versatile programming language used in many different ways. It powers many Windows and .NET apps for desktop, tablet, mobile, and web applications. Coders and programmers also use C# in cross-platform development, using Unity for games and using Xamarin for mobile apps. C# is a hybrid of C and C++, it is a Microsoft programming language developed to compete with Sun's Java language. C# is an object-oriented programming language used with XML-based Web services on the .NET platform and designed for improving productivity in the development of Web applications.

Amarnath explained about the .net framework applications in briefly. A programming infrastructure created by Microsoft for building, deploying, and running applications and services that use .NET technologies, such as desktop applications and Web services. The .NET Framework contains three major parts: the Common Language Runtime. the Framework Class Library. ASP.NET. ASP.NET is an open-source server-side web application framework designed for web development to produce dynamic web pages developed by Microsoft to allow programmers to build dynamic web sites, applications and services. ... The ASP.NET SOAP extension framework allows ASP.NET components to process SOAP messages.

He explained about the benefits of .net. Less Coding and Increased Reuse of Code: This framework works on object-oriented programming which eliminates unnecessary codes and involves less coding for the developers, Deployment, Reliability, Security, Use across Platforms and Languages.

He then started explaining regarding the C#. Windows Presentation Foundation (WPF) is a UI framework that creates desktop client

applications.WPF uses the Extensible Application Markup Language (XAML) to provide a declarative model for application programming. Difference between WPF and Windows Forms. Windows Presentation Foundation (also known as WPF) is a graphical subsystem. It is used in order to render user interfaces in Windows based applications. ... It is a feature of the Windows .NET Framework, and provides access to the native Microsoft Windows interface elements.

Finally he explained about XAML in C#. XAML is a descriptive programming language used in UWP, WPF, and Xamarin Forms to build user interfaces. Most of the time, you will be using a designer to create your XAML but you're free to directly manipulate XAML by hand. XAML uses the XML format for elements and attributes.