Alva's Institute of Engineering & Technology
Shobhavana Campus, Mijar, Moodbidri, D.K – 574225

AIET

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

E-NEWS LETTER- "BITS and BYTES"

Volume-2, Issue-2

Academic Year 2018-19 Even

SPECIAL POINT OF INTEREST

MESSAGE FROM HOD

DEPARTMENT VISION

"Engendering competent, excellent professionals by transforming the knowledge and computing skills to individuals through modern innovative tools and techniques"

IN THIS ISSUE

➢ Technical Talks

➢ Certification program

➢ Technical Activities

➢ Parent-Teacher meeting

➢ Workshops

➢ Student Achievements

➢ Placement News

DEPARTMENT MISSION

- *To produce skilled, creative software developers through rigorous training.*

- *To conduct specific technical courses to keep abreast to the latest technological developments and transformations in the domain.*

- *To establish Industry-Institute Interaction programs to enhance the skills of employability and entrepreneurship.*

- *To implement the ideas of research and innovations in interdisciplinary domains*

EDITORIAL BOARD:

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MESSAGE FROM H.O.D

Department E-News Letter **"Bits & Bytes"** *Editorial Board has taken a decision to reach the departmental activities to all stake holders through the college websites, email and other social media this time. Many more new events have been included this time along with earlier. I wish the editorial team to continue the same work in future.*

-Dr. Manjunath Kotari

PROGRAM SPECIFIC OUTCOMES

A graduate of the Computer Science and Engineering Program will exhibit:

PSO1: Professional Skills: The ability to understand & implement the computer programs in the areas of Computer Architecture, System Software, Database Management Systems, Web Design, Multimedia and Computer Networking.

PSO2: Problem-Solving Skills: The ability to solve real-world problems by suitable mathematical model with strong technological concepts in rapidly growing arena of computer technology.

PSO3: Successful Career and Entrepreneurship: Knowledge in diverse areas of Software Engineering and Management & Entrepreneurship for IT Industry, conducive in cultivating skills for successful career development.

PROGRAM EDUCATION OUTCOMES

The graduates of Computer Science & Engineering will be able to

PEO1: Exhibit fundamental strengths of core courses of Computer Engineering to solve the problems of computing world.

PEO2: Adapt and contribute the emerging technological changes.

PEO3: Get employed in computing profession or engaged in learning to pursue higher studies.

TECHNICAL TALKS

Topic: "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. Prithvi explained about the context with respect to the lunar landing, Mission Trajectory, Lunar Orbit Strategy and Lunar descent.

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.

Topic: "Intel Software Tools"

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

lResource 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 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. 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.

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 IBMS 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.

"TCS ORIENTATION PROGRAMME"

DATE & VENUE: *6th May, AIET AUDITORIUM*

Resource Person: Mr. Pradeep and Mr. Rohith, Senior Technical Staff members, TCS, Bengaluru.

Mr. Pradeep explained about the how the academic institutes are key partners in TCS' talent acquisition strategy, and we remain the preferred employer at leading engineering campuses across India. Campus Commune, our academic engagement portal that helps students collaborate with their peer groups globally, now has over one million members registered across 19 countries. We also use programming contests such as TESTimony, EngiNx, GameOn, and CodeVita to spot and hire top talent.

Mr. Rohith explained about the progressive working environment in the TCS. TCS is an equal opportunity employer, and subscribes to the Tata Code of Conduct in embracing diversity in race, nationality, religion, ancestry, marital status, gender, age, ethnic origin, physical ability, and sexual orientation. Today, we are one of the world's largest employers of women.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATION PROGRAMME

Apple iOS

Department of Computer Science & Engineering established Apple iOS Lab for App Development Activity Purpose. The institution has got Apple University Programme ID, currently all interested students of CSE, ECE, ISE are involved in App Development Activity through Certification Programs. The institution has MoU with Callibre Code Pvt. Ltd, Bangalore for Certification Programs. Through MoU institution is conducting continuously App Development Programs. The following Apple iOS apps were developed by CSE students of AIET has been approved by App Store.

The following apps were approved by App store:

APP Name	LINKs of iOS APPs in APP STORE
MERGIO	https://itunes.apple.com/in/app/mergeo/id1438548443?mt=8
YOGA STATION	https://itunes.apple.com/in/app/yogastation/id1439488896?mt=8
MUSICAL EXPRESS	https://itunes.apple.com/in/app/musicalexpress/id1438653274?mt=8
FITREAT	https://itunes.apple.com/us/app/fitreat/id1453315210?ls=1&mt=8
ChildSlate	https://itunes.apple.com/us/app/childslate/id1461671756?mt=8
FloraHunt	https://itunes.apple.com/us/app/florahunt/id1465949442?mt=8
Twist Tac Toe	https://itunes.apple.com/us/app/twist-tac-toe/id1461649998?mt=8

Cyber Security

8 days Certification Course on the theme "Cyber Security" was organized from 18th February 2019 to 25th February 2019 by Department of Computer Science & Engineering, Alva's Institute of Engineering & Technology, Moodbidri, Karnataka with Technical Collaboration of Computer Society of India(CSI) Student Chapter and Co Sponsored by Dlithe Bangalore. 70 CSE students were registered for the course and obtained a Certificate from the Dlithe Bangalore

Data Analytics, Machine Learning and 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.

Technical Activities

ALVAS HACKATHON 2K'19

ALVAS HACKATHON was an intra collegiate technical event conducted by C-Maniax forum of Computer Science Department, AIET. ALVAS HACKATHON 2K19gathered all the engineering minds of AEF and various different engineering colleges all over Karnataka. ALVAS HACKATHON2K19 provided the platform to showcase student's coding skills, hacking, web designing, chatbot development and app development abilities and gave them recognition. ALVAS HACKATHON 2K19was conducted on 18th February 2019 at AIET main campus. ALVAS HACKATHON 2K19 was inaugurated by Mr. Rakesh Chowdari, developer at Synopsis, Bangalore. There were 125 students who actively participated in the event in various events.

The event list of ALVAS HACKATHON 2K19:

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

TECHNOFIA'19

Technofia was an inter-collegiate technical fest conducted by C-Maniax forum of Computer Science Department, AIET. Technofia gathered all the curious and engineering minds of 13 different Colleges of Dakshina Kannada and Udupi region. Technofia provides the platform to showcase student's talent and technical abilities and gave them a recognition. Technofia'19 was conducted on 14th& 15thMarch 2019 AT AIET main campus. Technofia was inaugurated by Mr. Sheikh Moidin K M, Manager Operations, Expertise Contracting Co. Ltd

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

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PARENT - TEACHER MEETING

Parents Teacher's Meet of CSE department was held on 30th January,2019 at AIET. HOD of CSE department Dr. Manjunath Kotari had given a brief report of the department. He also explained the various upcoming activities of the Department. Parents had given with the awareness of NBA Accreditation Process and its importance.

Parents were discussed with various Teachers about their ward. Parents were interacted with HOD, Dean and Principal about upcoming events and rules & regulations of the college. Dean Academics Dr. Praveen J explained the rules & regulations of the Hostels & College Campus. Principal Dr. Peter Fernandes briefed about the college rules & regulations to all the parents (like Mobile and Two Wheeler restriction etc)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Workshops

C++ and Java - an interview based approach and a bridge course for OOC with hands-on sessions

Resource Person: Dr. S.MohideenBadhusha, Sr.Professor/CSE, AIET, Moodbidri.
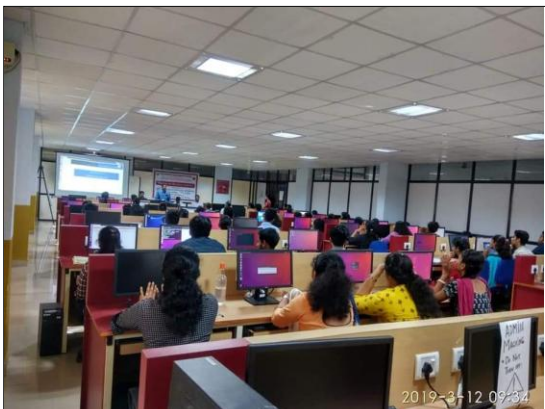
Alva's Institute of Engineering and Technology conducted 3 days workshop on "**C++ and Java – an interview based approach and a bridge course for OOC with hands-on sessions**" for **2nd year students** organized by Department of Computer Science and Engineering on 11th to 15th FEB 2019. A total of 120 participants from CSE department had been participated in this workshop.

Hadoop for Big Data Analytics

Resource person: by Mr. Manjunath Mulimanni, Research Scholar, NITK, Surathkal

Department of CSE organized workshop **on "Hadoop for Big Data Analytics"** 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

Let's Latex

Resource person: Dr. Sumith N, AIET, Moodbidri.

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. 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 present during the inauguration.

Students Achievements

Students Achievements in Academic Colloboration/MoU Organizations

NARL(National Atmospheric Research Laboratory)-ISRO,Tirupathi, AP

Sl. NO	Topic	Duration and Date	Details of Resource person
1.	Mr. Manish B Shriyan, Mr. P Vighnesh Pejathaya, students of 3rd Year completed 1st Phase of NARL Project titled "**Automated GNSS Field Receiver using Microcomputer Board and its use in Mapping**"	21-01-2019 to 22-02-2019	Dr. Nirvikar Dashora, Sci./Engr.-SF, NARL, Gadanki, AP
2.	Mr. Marsh Vishal Lobo, Mr. Nayak Vishal Sadananda students of 3rd Year completed 1st Phase of NARL project titled "**Algorithm for Integer data break and outlier detection in Geosciences observations**"	21-01-2019 to 22-02-2019	Dr. Nirvikar Dashora, Sci./Engr.-SF, NARL, Gadanki, AP

National Remote Sensing Centre (NRSC)-ISRO, Hyderabad

1.	Mr. Rasik Shetty, Mr. Sanath Shetty, Mr. Parikshith Adiga B, 3rd Years CSE complted the Project Titled "**Data Analytics with ELK stack and custom dashboard application for Bhuvan usage statistics**" at NRSC, Hydrabad	17-01-2019 to 17-04-2019	Mr. Avishek Ghosh Roy, Dr. Rajashree Bothle, GM, Outreach Facility, NRSC, Hydrabad

Regional Remote Sensing Centre (RRSC)-South-ISRO, Bangalore

1.	Ms. Nidhi Chakravarthy, Mr. Prajwal S, Ms. Rakshitha M, Ms. Shetty Niketha S completed project titled "Image classification using APACHE SPARK" at RRSC-South.	16th January 2019 to 16th May,2019	Dr. S. Ramasubramanian, Scientist/Engineer, RRSC-South, Bangalore

List of Companies Provided Internship CAY (2018-19)

Sl.No.	Name of the Company	Number of Students
1.	NARL-ISRO, AP	04
2.	NRSC-ISRO, AP	03
3.	RRSC-ISRO, Bangalore	01
4.	IIIT, Allahabad	39
5.	IIM, Bangalore	03
6.	HAL, Bangalore	09
7.	BHEL, Bangalore	02
8.	IBM Labs, Bangalore	04
9.	Seimens, Mumbai	04
10.	Sasken, Bangalore	02
11.	Mitra Software, Shivamogga	03
12.	Mindsoft-HP, Bangalore	02
13.	Callibre Code Pvt.Ltd, Bangalore	30
14.	SOIS, Manipal	06
15.	IQ Gateway, Bangalore	01
16.	MedPac Solutions, Bangalore	02
17.	Technovice Pvt. Ltd, Mysore	07
18.	Amphisoft, Mysore	03
19.	Mobinius, Bangalore	01
20.	Hamshine, Bangalore	03
21.	Zoom Tail Technologies, Bangalore	01
22.	Evry Pvt Ltd, Bangalore	01
23.	Azure Skynet Solutions Pvt. Ltd. Hydrabad	01

NPTEL Online Certification Courses

Department of CSE students were actively involved in NPTEL Online Certification Courses and Certification Exams. The 68 students(ODD Sem 31 + EVEN Sem 37) were successfully completed NPTEL Courses in this academic year on various courses like IoT, Machine Learning, Data Analytics, Java Programming, Cloud Computing etc.

Course Statistics Even Semester 2018-19	
Course Name	**Number of students**
Big Data Computing	11
Introduction to Internet of Things	11
Progarmming in Java	9
RTOS	1
Social Networks	2
Cloud Computing	1
Data Mining	2
Total	**37**
Grade	
Elite Gold	**8**
Elite Silver	**7**
Elite	**5**

Students Internship Statistics

Sl. No	Academic Year	No. of Students completed	Number of Industries /Organizations
1	2018-19	134	23
2	2017-18	99	17
3	2016-17	79	24

Pre-Placement Training for 3rd Years

The pre-placement training was arranged to 3rd Year CSE students by Q-Spiders, Bangalore. The training was conducted for 10 days on the topic "Applications of C and Data Structures" during March-April 2019. The "Java Programming" is scheduled for 8 days during July,2019.

Staff Achievements

Research Paper Publications and Workshops

Sl. No.	Author	Research Paper Title	Refereed	SCI Journal	Citation	/Book Chapter
1.	Dr. Manjunath Kotari	Investigation of Security Issues and Promising Solution in Distributed Systems Monitoring			Handbook of Computer Networks & Cyber Security, Springer-2019	√
2	Dr. S. Mohideen Badhusha	Improved video streaming using MSVC and nonoverlapping zone routing multipath propagation over MANETs	√	√	International Journal of Communication Systems, Wiley publications	
3.	Mr. Vivek Sharma	Review Of Fingerprint Based Automobile Anti-Theft System	√		IRJET	
4.	Dr. Sumith N	Influence Maximization In Large Social Networks: Heuristics, Models And Parameters		√	FGCS	
5	Vasudev Shahapur, Hemanth Kumar N P, Vivek Sharma	Attended RPI UiPath Educator Workshop			BMS College - 17th June to 21st June,2019	
6	Mr. Venkatesh and Mr. Parikshith Nayaka S K	Attended e-Yantra Robotics Workshop			AIET- 11th & 12th June,2019	
7	Harshitha G M	Attended "Big data Analytics" Workshop			SDM Ujire, 10th-16th Jan,2019	

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PLACEMENT NEWS

INFOSYS	NINJA CART
1. Anusha	1. Deeksha
2. Anushri	2. Priyanka B.M.
3. Divya R	3. Sanjay M N
4. Ganesh Shrikant Palekar	4. Shruthi Tharanath Salian
5. Madhukara	**FACE**
6. Megha	1. H Akshay Kedlaya
7. Sneha K N	2. Vaibhavi Vitthal Kulkarni
8. Surekha Srihari Reddy	MEDPAC
9. Varsha S	1. Geethanjali Bishtannavar
EXTRA MARKS	**CONZULERE**
1. Jeffin Boban	1. Arjun K
2. Kalavara Deekshith Raj	2. Arjun V
3. Rakshitha Acharya	3. Sharath D S
SILVER PEAK	**NUWARE**
1. Pavithra G	1. Deeksha Shetty
Goan Institute	**LEGALDESK.COM**
1. Rajarajeshwari B B	1. VINAY S
2. Sanjay M N	2. Pavitra G
TVM Signaling	**ARI'S GLOBAL**
1. Prajwal S	1. Kumaraswamy V S
2. Sushanth	THOMSON REUTERS REFINITIVE
3. Ranjith	1. Thurpthi
4. Sachin Pandith	
5. Sridevi Prabhu B S	

INSTITUTE VISION

"Transformative education by pursuing excellence in engineering and management through enhancing skills to meet the evolving needs of the community"

INSTITUTE MISSION

- *To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.*
- *To inculcate the best engineering practices through transformative education.*
- *To develop a knowledgeable individual for a dynamic industrial scenario*
- *To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.*

PROGRAM OUTCOMES (PO'S)

Engineering Graduates will be able to:

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

2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions

5. Modern tool usage: 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.

6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

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

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

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

10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long learning: 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.