



# SAKSHIN

MONTHLY NEWSLETTER OF DEPARTMENT OF  
CSE/IT

## VISION

- *Nurturing globally competent Computer Science and Engineering graduates capable of taking challenges in the Industry and Research & Development activities*

## MISSION

- *Imparting quality education to meet the needs of industry, and to achieve excellence in teaching and learning*
- *Inculcating value-based, socially committed professionalism for development of society*
- *Providing support to promote quality research*

## RECENT PLACEMENTS



Adithya Shenoi  
(S8 CSE)  
ACCENTURE



Deepak Surendran Pillai  
(S8 CSE)  
UST GLOBAL



Sruthy S Nair  
(S8 CSE)  
WIPRO



Fathimath Sunitha  
(S8 CSE)  
UST GLOBAL



Rizni Abullies  
(S8 CSE)  
ACCENTURE



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logicPlum



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FLYCATCH



Aiswarya PL  
(S8 IT)  
INFOSYS



Jyotsna MS  
(S8 IT)  
INFOSYS

## CONGRATULATIONS !!!



### "Working together is success"

Department of Computer Science and Engineering along with the other branches of ASIET have received the NBA Accreditation extended till 2022 June. Congratulations to the ASIET Management, Principal, faculties, staff members, students and parents for the teamwork.



# S5 UNIVERSITY TOPPERS



**Adi Shankara**  
INSTITUTE OF ENGINEERING AND TECHNOLOGY

## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING S5 UNIVERSITY RESULTS TOPPERS 2021



**POOJA NAIR - 10**



**ELIAS THAMBI - 9.87**



**MEENAKSHI P D - 9.87**



**VINDHUJA K - 9.76**



**MILNA ELDHO - 9.74**



**ABHIMANEU KJ - 9.7**



**SRIVATHSAN - 9.7**



**APARNA T J - 9.48**



**GAUTHAM G PANICKER  
- 9.41**



**ANANDHU P M - 9.26**



**ARDRA N P - 9.26**



**DONA MARIYA JOHN  
- 9.17**

*Congratulations*



**ANUSREE G - 9.15**



**ABHIRAM K G - 9.13**

# I2P CONTEST

We are happy to announce the AdiShankara I2P Contest winners (Dept.Category CSE)  
**First Position:** Athul Blesson and team mentored by Dr. Sujith Kumar P S for the project "Draw Bot".

**Second Position:** Aalap P Joshy and team mentored by Asst. Prof. Sumesh M S for the project "Automatic Power failure Alert System for KSEB".

Congratulations to the winners!!!!



Projects selected from the CSE department for the next round Phase II are :

Sl. No:	Participants	Title of the project	Mentor name
1	Athul Blesson Ashique K Snehanjan Nikhil Chacko	Draw Bot	Dr. Sujith Kumar P.S
2	Aalap P Joshy Arun Varghese Jose Johny Joyal Varghese	Automatic Power failure Alert System for KSEB	Prof. Sumesh M S
3	Abhijith Jaideep Alfiya M J Anusha P S	Automated Animal Feeder	Prof. Ramesh R
4	Jyotsna M S Anagha K S Aisha Mehrin C T	Covid-19: Health Monitoring System Using LoRa	Prof. Divya K S
5	Elias Thambi David PT Abhijith PU	Smart Entrance System	Prof. Sreeresmi T S
6	Meenakshi P D Jemi Mariya Jose Maris Baby	Smart Door Bell	Prof. Ramesh R
7	Midhun KS Kamal VS Jeswin Davis	Landslide detection and alarm system using LoraWAN	Prof. Raghi R Menon
8	ATHIRA BHADRAN ASWATHI H GAYATHRI DEVANAND HARIPRIYA R NAIR	IMP ( INNATE MOBILE PRINTER )	Ms. Divya K S/Dr. Sujith Kumar



## STUDENTS CORNER

### ONLINE COURSES/WEBINARS/WORKSHOPS

#### IIRS ISRO ONLINE COURSE

- Vindhuja K, Milna Eldho, Prashanth P Nair and Gopalkrishnan of S7 CSE B completed the online course of (IIRS ISRO) on 'Overview of web Gis Technology'.

#### WORKSHOP

- Malu Mohan of S2 CSE(AI) attended a workshop conducted by CSI on 'App development using Flutter'.

#### MOOC COURSE

- Aaron P Laiju of S2 CSE(AI) completed the MOOC courses on 'Google Cloud Platform Fundamentals: Core Infrastructure' and 'Essential Google Cloud Infrastructure: Foundation' in the month of July.
- Mareena Kunjachan of S8 CSE has completed the course 'Artificial Intelligence Foundations(V 2 SKOAI101)' , Applied course on 'Machine Learning : Linear Regression' and Applied course on 'Fundamentals of Data Analytics' by LEAPS Analytica from 04/06/2021 to 09/06/2021.
- Sruthy S Nair of S8 CSE has completed an online non-credit course on ' Migrating to Google Cloud' authorized by Google Cloud and offered through Coursera on 05/06/2021.
- Subith O Babu of S8 CSE has completed an online course on 'Introduction to AWS identity and Access management' offered through Coursera on 27/05/2021

#### BOOTCAMP

- Alvin Regin and Edwin Martin of S2 CSE(AI) completed a bootcamp on 'ShapeAI- Python and Cyber Security', 'ShapeAI- Python and Data Analytics' and 'ShapeAI- Javascript & React JS'.
- Aswathy Jayakrishnan of S2 CSE(AI) completed 'ShapeAI- Python and Cyber Security Bootcamp'.
- Jayanth Rama Varma of S7 CSE B completed 'The complete 2021 web development bootcamp'.

## WEBINAR

- Vishak SS and Sudeep PS of S2 CSE B participated in a webinar on "Importance And Demand Of Cyber Security In Digitalization" on 20/07/2021.
- Aswathy S attended a webinar on 'Build from home project by Tinkerhub foundation'.
- Bazil Alias and Malu Mohan of S2 CSE(AI) attended a webinar on 'Cybersecurity'.
- Malu Mohan and Geeba Babu of S2 CSE(AI) participated in 'Hack-N-Slash' a webinar by Hackersvilla
- Ashik K J of S2 CSE(AI) participated in a webinar on 'Art of Writing Research Paper'.

## QUIZ / ONLINE EVENT

- Gayathri Devi C G, Dona Babu, Viji Varghese Manjaly, Vijaithakrishna S Ghosh, Rose Mary Jose, Rincy Pereira, Revathy A S, Parvathy Radhakrishnan , Parvathy B, Malu Mohan, Ashik K J, Geeba Babu, Bazil Alias, Gauri A, Darshana P and Aleena Maria of S2 CSE(AI) participated in 'NSS Busta Di Carta', paper bag making competition conducted by NSS unit of GEC, Wayanad on 03/07/2021.
- Darshana P, Aleena Maria, Megha Baiju and Gauri A , Amrutha Das, Adwaith Nishin of S2 CSE(AI) , Jonathan Jobby Pynadath and Sanjay Gireesan of S2 CSE B were the coordinators of the event "EUPHORIA" conducted by the semester 2 students for the plus two students.
- Meera Roy of S2 CSE B participated in an Online Quiz on Environmental Science conducted by the Physics department and Science Forum of Sree Sankara Vidyapeetom College on 05/06/2021.
- Amrutha Das of S2 CSE(AI) participated in an 'Article writing' competition hosted by IEEE SB GECT Thrissur on 06/06/2021.
- Aaron P Laiju of S2 CSE(AI) hosted the event 'SAPHIRE' conducted by CSI , ASIET from 12/06/2021-14/06/2021.
- Aswathy Jayakrishnan of S2 CSE(AI) participated in an online poster making competition, Fig Foss Talk series and Calypso quiz competition .
- Geeba Babu and Malu Mohan participated in AGREYA 2021:Virtual Treasure Hunt conducted by SNGIST College.
- Bazil Alias of S2 CSE(AI) participated in NSS TrashGold- Trush to treasure competition .



- Malu Mohan participated in AGREYA 2021:Photography competition conducted by SNGIST College , NSS Plastoon- Cartoon drawing competition, NSS TrashGold- Trush to treasure competition , Sinfonia musical competition and Codezilla 1.0: programming competition.

## FACULTY CORNER

### Research Talk



**Asst.Prof.Teena George**  
**Dept.of.CSE**

The Thirteenth research seminar of the computer science and engineering was presented by prof.Teena George. Assistant Professor CSE on the topic "Zero trust strategy in Cloud Computing" on 07.06.2021 via Google meet. The session focused on providing an introduction to Zero Trust approach in Cloud Computing. The session began by explaining the security aspects of traditional network model, the drawbacks of the existing model and the need for a new model with improved security. A zero trust model and an example was shown. Advantages and challenges faced by the model was also discussed in the session.



**Asst.Prof.Jain Stoble B**  
**Dept.of.CSE**

The eighteenth research seminar of the computer science and engineering was presented by Prof.Jain Stoble B, Associate professor CSE on the "Texture based Multi-View Face Recognition in Noisy images using BRINE Feature" on 8/7/2021 via Google meet. The session focused on a novel feature Brint. It began with introduction to the fundamental concepts like image processing, human face recognition, its applications. Later several features for face detection and training methods were touched upon. The session was concluded with discussion on implemented results.

## **FDP attended/workshop attended**

- Asst.Prof.Divya K S attended online ATAL FDP on "Deep Learning" from 05/07/2021 to 09/07/21 at Atal Bihari Vajpayee Indian Institute of Information Technology and Management Gwalior.
- Asst.Prof.Remya Vinayakumar , Asst.Prof.Rosemary Varghese and Asst.Prof.Jain Stoble B and Dr.Sujithkumar attended 5 days ATAL FDP Faculty on "Infrastructure and security challenges in cloud computing", organized by Department of Computer Engineering, SCMS School of Engineering & Technology.
- Asst.Prof.Jain Stoble B, Asst.Prof.Asha Rose Thomas, Asst.Prof.Gripsy Paul Mannickathan, Asst.Prof.Rosemary Varghese and Asst.Prof.Remya Vinayakumar attended a webinar on “An Introduction to AI” on 14/07/2021 by TCS
- Asst.Prof.Divya G and Asst.Prof.Ramesh R participated in an Open Source Summit India-2021 conducted by Saintgits College of Engineering and FOSS Asia from 28/06/2021 to 02/07/2021.
- Asst.Prof.Teena George, Asst.Prof.Rosemary Varghese, Asst.Prof.Remya Vinayakumar, Asst.Prof.Jain Stoble B, Asst.Prof.Raghi R. Menon and Asst.Prof.Neetha K. Nataraj attended an online STTP on "Machine Learning & Deep Learning with Deployment" from July 22nd to July 24th 2021 organized by the Department of Electronics and Communication Engineering, Adi Shankara Institute of Engineering and Technology, Kalady.
- Asst.Prof.Simi MS participated in a 5 day online FDP on "DATA SCIENCE FOR THE NEXT DECADE" , sponsored by KTU , organized by the department of CSE Toc H, from 5/7/2021-09/7/2021.
- Asst.Prof.Raghi R. Menon, Asst.Prof.Neetha K. Nataraj, Asst.Prof.Teena George and Asst.Prof.Anaswara Jayan attended webinar on "Securing Intellectual Copyrights" on 29/07/2021.
- Asst.Prof.Gripsy Paul Mannickathan attended a webinar on "Reimaging Youth Skill Post Pandemic",on 15/07/2021 by ICSI.
- Asst.Prof.Asha Rose Thomas attended a webinar on "Intellectual Property Rights ",on 15/07/2021 organized by St.Thomas College of Engineering.
- Asst.Prof.Ramesh R attended webinar on Reconfigurable Digital Systems: A case for FPGA - Driven Design conducted by EEE department, ASIET. He also attended a tech talk on Immersive Virtual Reality By Mr.Sreenath Moorchilot, CEO - Holomet, 09/07/2021.



## Paper Publication/Presentation

- Asst.Prof.Rosemary Varghese, Asst.Prof.Remya Vinayakumar and Asst.Prof.Jain Stoble B has published a paper on “Driver Drowsiness Detection System Based on Eye Closure” in International Journal of Advances in Engineering and Management (IJAEM) Volume 3, Issue 7 July 2021, pp: 2371-2375 [www.ijaem.net](http://www.ijaem.net) ISSN: 2395-5252.
- Asst.Prof.Simi MS presented a paper titled “LATENT EVENT FACETS AND NEWS SPECIFICITY FOR THE READER COMMENT DIGESTION” in the ICRTAI on 30/07/2021.
- Asst.Prof.Gripsy Paul Mannickathan presented a paper "Covid Risk Prediction using Machine Learning",in the ICRTAI on 30/07/2021.
- Asst.Prof.Teena George presented a paper "Literature survey on various smart greenhouse automation systems" in the ICRTAI on 30/07/2021.
- Asst.Prof.Anaswara Jayan presented a paper "A web application for farmers" in the ICRTAI on 30/07/2021.
- Asst.Prof.Jain Stoble B presented a paper "A web-based application for monitoring crowd status in stores" in the ICRTAI on 30/07/2021.

# RESEARCH LAB ACTIVITIES

## Bio-Informatics Lab

The BioInformatics Research Lab facility in the CSE department supports the research activities and project development of the students. Information gathering and knowledge discovery is the latest challenge in modern biology. Genomic information retrieval, better understanding of disease mechanisms and novel drug discovery solutions has made possible through bioinformatics approaches. With the intention of providing high end services and quality education in Bioinformatics, BioInformatics Research Labs have formed.

### Faculties in-charge

1. Asst.Prof.Divya KS
2. Asst.Prof.Jain Stoble B
3. Asst.Prof.Rosemary Varghese

### Projects Completed

- Disease Prediction System using Sequence Alignment
- An Automated System for IOL Power prediction
- Dermatological Disease Detection Using Image Processing & Machine Learning.

### Ongoing Projects

- Identification of biomarkers using deep learning techniques.
- Automated brain tumor identification.

### Recent Paper Publications

- "Survey on Usage of Machine Learning Techniques in Different Biological Domains".
- "Pill Reminder and Prescription Digitalization Application Using PHP and Android"
- "Disease Prediction System using Sequence Alignment."
- "An Automated System for IOL Power prediction"

### Activities conducted

- Expert talk on "Recent trends in Bio-Informatics" by Dr.Biji CL , University of Kerala
- Workshop on "Bio-Informatics using Machine Learning" by Ms.Sunitha P, Ms.Suma Anil, Ms. Rashmi S and Dr.Biji CL , University of Kerala.
- Expert talk on "Advances and Future direction of Bio-Informatics" by Dr.Madhu PC, METS School of Engineering.
- Online Interaction on various projects in Bio-Informatics by Dr.TRG Nair.



# The Tech-Content

“Artificial intelligence will reach human levels by around 2029. Follow that out further to, say, 2045, we will have multiplied the intelligence, the human biological machine intelligence of our civilization a billion-fold.” - Ray Kurzweil (<https://www.linkedin.com/pulse/aye-ai-golden-age-innovation-artificial-computer-science-rahman-1e>).

## ALGO RHYTHM

### INDIA NOW AN AI INNOVATION HUB

The last five years have witnessed significant uptake of artificial intelligence (AI)-focused innovation in India, with over 4,000 AI patents being filed during the period, six times higher than the figure for 2011-2015, reveals a Nasscom study. India was ranked eighth in the top 10 countries by AI patent families on a global level, an impressive accomplishment considering it had no AI-related patent filing prior to 2002.

The Nasscom study uses data extracted from Questel Orbit Patent Database as of January 2021, with the support of Sagacious IP. It includes all AI patents for the period 2010-20, where the patent filed is in "India" as jurisdiction.

Compiled by Shivani Shinde



#### Key trends

- ▶ Over 5,000 AI patents filed over the last decade, 94% of them in the last 5 years
- ▶ Over 60% originated in India
- ▶ Consumer electronics/ personal computing devices and health care are the leading vertical focus areas
- ▶ With 93% share, machine learning is the most popular AI

technique; computer vision, with 36%, the leading functional area

▶ The tech sector has won the lion's share of AI patents, at 47%

▶ 5-fold increase in funding in privately-held Indian AI firms, from \$200 million in 2015 to over \$1 billion in 2019

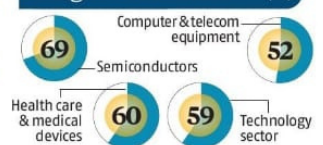
▶ Computer vision and NLP are the leading functional areas, with over 50% of AI patents

#### Assignee type (%)



MNCs lead Ratio of patents granted to those filed

#### Assignee's business (%)



#### Challenges

- ▶ Startups need policy, financial support and mentorship to take their innovations to market
- ▶ India published over 84,000

scholarly papers during 2010-2019, but only about 4,000 patents

▶ The current patent process (which takes 4 years from application to grant of patent) needs to be made more efficient and accessible

## Aye Aye AI - Golden Age of Innovation in Artificial Intelligence & Computer Science – How will this impact Humans?



**Rapid Growth Humanity**  
AI helps humans to advance at Rocket Speed



**Industry 4.0**  
AI to propel the fourth generation of Industrial Revolution



**Innovation at the Core**  
AI to drive innovation in all spheres of Life



**Ethical Insights**  
AI to be controlled with Ethical Bill of Rights

**Aye Aye AI; Hi Hi BI;  
Aye Aye AI; Bye Bye Tie Guy;**

**Aye Aye AI; Hi Hi AI;  
Aye Aye AI; Fly Fly Sky HI**

**Aye Aye AI; Hi Hi UI;  
Aye Aye AI; Try Try AI;**

**Swarm Intelligence  
Sentient AI  
Biometrics  
Speech Recognition  
Virtual Agents**

**Image and Video Analysis  
Robotic Process Automation**

**Natural Language Processing & Generation**

**Deep Learning Systems (Adaptive, Genetic, Mutational)**

**Machine Learning Platforms (Supervised & Unsupervised)**

**Decision Management AI optimized Hardware**