

(An Autonomous Institute)

Department of Computer Science & Engineering

# NEWS LETTER OF A CADEMIC SEMESTER OF (JANUARY'24 – JUNE'24)



(An Autonomous Institute)
Department of Computer Science & Engineering

## UNIQUE

#### HOD'S Message



Dr.Bikram.jit Sarkar HOD, Dept. of CSE

At the very outset, the department of Computer Science and Engineering welcomes the aspirants to be a part of the booming computer science community and become visionaries and change makers of the future.

Technical Education is one of the most significant components of Human Resource Development spectrum with great potential for adding value to products and services for contributing to the National economy and for improving the quality of life of the people. In reorganization of the importance of this sector, the department of Computer Science and Engineering was established with the primary goal of providing quality education in the field of Computer Science and Engineering, while addressing the problems of today and tomorrow.

Right from its inception, the department has been offering excellent infrastructural facilities to aspire students to meet the growing demands of the industry. The aim of the department is to provide students both theoretical knowledge and practical skills in the field of latest technology to make it easier for the employment in various sectors.

The department of Computer Science & Engineering is well equipped with centralized laboratories having the latest configurations. The department is very actively pursuing research in diverse fields of Computer Science world ranging from Security, Mobile Applications, Wireless Networking, Machine Intelligence, Image Processing and lots more.

Our students have participated in different Inter-Intra Institutional events and bagged different prizes. Faculty members are associated in programs such as, NPTEL, IIT-Bombay Spoken Tutorial Program, QEEE program, SWYAM program and lots more. The PG programme commenced in the year 2008 entitled M. Tech. in Computer Science and Engineering. The UG programme has been accredited by National Board of Accreditation in the year 2006. The college received Autonomy from UGC in 2011.

#### VISION

The Computer Science and Engineering Department at JIS College of Engineering will be a leader in computing innovation through excellence in undergraduate and graduate education, active research programs and the dissemination of knowledge. The Department will leverage both the international and interdisciplinary nature of computing.

#### MISSION

The Department's mission is to provide students and faculty with an open environment that encourage professional and personal growth. The academic programs mission is that to prepare students for flexible career paths and continuing advancement in computing. The students are motivated and encouraged to build a successful career in the computing professions through flexible programs of study that can be adapted to support individual career goals.

#### **FACULTIE'S Message**



Ms. Jayeeta Ghosh (AP/CSE)

JIS College of engineering is a great place to learn and research. Computer Science & Engineering department provides different laboratory such as Network Lab, Operational Research Lab, Advanced Database Systems Lab, Computer Architecture Lab, Web Technology Lab and many more with high-speed internet facility. The department takes initiative to organize different seminar and workshop for different computer field. The department also takes initiative to improve the quality of the students so that they can face the competition in the corporate world confidently. My best wishes to all the students of Computer Science and Engineering Department.



Ms. Ira Nath (AP/CSE)

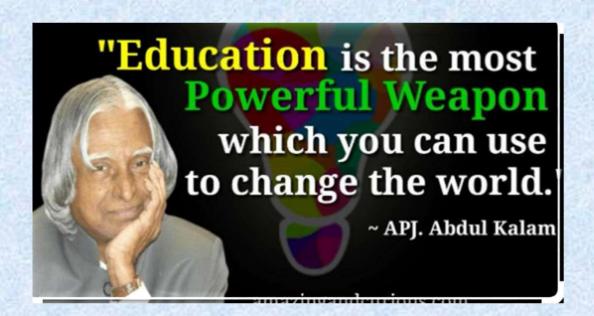
IIS College of Engineering, Kalyani is an autonomous institute. The faculty members of Computer Science & Engineering Department of IISCE are experienced, active, enthusiastic, energetic and friendly to their students. All the students are very much encouraged to make their career smooth and glorious. All faculty members are engaged for teaching the students as well as in their research work. Our department is motivated and helpful to bring success to the students. I wish all the members, stakeholders, students and faculties concerned with the CSE department, health, good luck and best wishes for the future.

#### **EDITORIAL'S Message**



Mr. Sumanta Chatterjee (AP/CSE)

It is our immense pleasure to work on this edition, included in the words from our HOD/CSE Prof. Dharmpal Singh and senior faculties. It also highlights events, workshop, seminars, publications, achievement and many more. In this edition, we have tried to capture last few months excitement and activities. We have also included the achievement of the students and faculty members from the CSE department in curricular, co-curricular and Extracurricular activities. I sincerely hope that this edition makes for an interesting read.



## FACULTY PUBLICATIONS (January 2024 to June 2024)

#### **Indexed Journal Publications**

- **1. Ira Nath**, Sumit Das, Dipansu Mondal, Baivab Mukhopadhyay, Souradip Pal, Disha Karmakar, "Child Safety Al QR: Empowering Child Safety through Artful QR Technology", Intelligent Systems and Applications in Engineering. Published 12.06.2024. **(Scopus Indexed).**
- 2. S Das, T Saha, Ira Nath, D Mondal, "Exploring Machine Learning Methods for Developing a Predictive System for Parkinson's Disease", Biosciences Biotechnology Research Asia 21 (2), 569-582, 2024. (Web of Science indexed)
- **3.** Ira Nath, Subhranil Das, Sumana Barma, Chirasree Bhattacharyya, Subhankar Karmakar, "Revolutionizing Education: An Al Approach for Innovative E-Learning Platforms", Journal of Electrical Systems 20 (3), 2920-2927. Published-19.06.2024. (Scopus Indexed)
- Sumit Das, Ira Nath, Monali Sanyal, Purba Kar, "<u>Design and Analysis of an Expert System for Identification Types of Cancer</u>", Indian Journal of Natural Sciences 15 (83), 70993-71001. Published-04.2024. (Web of Science indexed)
- 5. S Dutta, P Pal, P Das, PH Borsha, **T Bera (2024).** CREDIT CARD FRAUD DETECTION USING MACHINE LEARNING AND DEPLOYMENT USING FLASK. International Journal of Computer Science and Mobile Computing 13 (5), 71 75
- **6. Ghosh, J.**, De, P., Chattopadhyay, S., Dutta, S. P., & Sarkar, S. K. (2024, June). A study of supervised machine learning techniques to predict cyclone. In AIP Conference Proceedings (Vol. 3122, No. 1). AIP Publishing.
- 7. Chattopadhyay, S., Chowdhury, A., Dutta, S. P., Mukhopadhyay, K., **Ghosh, J.**, & De, P. (2024, June). Cumulonimbus cloud classification using transfer learning with AlexNet. In AIP Conference Proceedings (Vol. 3122, No. 1). AIP Publishing.
- **8. Rakshit, P.**, Sarkar, A. A supervised deep learning-based sentiment analysis by the implementation of Word2Vec and GloVe Embedding techniques. Multimed Tools Appl (2024). https://doi.org/10.1007/s11042-024-19045-7
- **9.** Rakshit, Pranati, Pronit Sarkar, and Shubhankar Roy. "Hybrid Deep Learning Approach for Sentiment Analysis on Twitter Data." *Multimedia Tools and Applications* (2024): 1-22.
- **10. Rakshit, P.**, Paul, S. & Dey, S. Sign language detection using convolutional neural network. J Ambient Intell Human Comput (2024). https://doi.org/10.1007/s12652-024-04761-7
- **11. Rakshit, Pranati**, Nandini Saha, Shibam Nandi, and Pritha Gupta. "Artificial Intelligence in Digital Twins for Sustainable Future." In *Transforming Industry using Digital Twin Technology*, pp. 19-44. Cham: Springer Nature Switzerland, 2024.
- **12. Rakshit, P.**, Sarkar, P., & Debnath, S. Transmission Dynamics Prediction Models with Data Visualization and Analysis of COVID-19. In *Global Digital Transformation and the Covid-19 Pandemic* (pp. 157-170). Apple Academic Press.
- 13. Bhattacharjee, S., Sarkar, S., Das, K., Sadhu, A., & **Sarkar, B.** (2024). Implementation Of Two Cross Two Switch To Implement Bitonic Sorting Circuit.
- 14. Das, K., Zaman, S., Khan, A., Sadhu, A., Bhattacharjee, S., Khan, F. S., & **Sarkar, B.** (2024). Hybrid-quantum approach for the optimal lockdown to stop the SARS-CoV-2 community spread subject to maximising nation economy globally. *IET Quantum Communication*, *5*(1), 19-37.
- **15. Sarkar, B.**, Saha, A., Dutta, D., De Sarkar, G., & Karmakar, K. (2024). A Survey on the Advanced Encryption Standard (AES): A Pillar of Modern Cryptography.

#### **Book Chapter Publications**

- 1. Ira Nath, Pranati Rakshit, Dharmpal Singh, "Diagnosis and Detection of Various Diseases Using Machine Learning Heuristics: A Study", Publisher: IIP Series, ISBN No. 978-93-6252-452-2. Publication Date: 29/04/2024.
- 2. Pranati Rakshit, Nandini Saha, Shibam Nandi, and Pritha Gupta. "Artificial Intelligence in Digital Twins for a Sustainable Future." In *Transforming Industry using Digital Twin Technology*, pp. 19-44. Cham: Springer Nature Switzerland, 2024. Springer (SCOPUS indexed)
- Saha, Nilanjana, Amrita Namtirtha, and Animesh Dutta. "CM-GCN: Crossbred Method based-Graph Convolutional Networks for identifying influential spreaders from directed networks." 2024 16th International Conference on COMmunication Systems & NETworkS (COMSNETS). IEEE, 2024.

# STUDENT PUBLICATIONS (January 2024 to June 2024)

- 1. S Dutta, P Pal, P Das, PH Borsha, T Bera (2024). CREDIT CARD FRAUD DETECTION USING MACHINE LEARNING AND DEPLOYMENT USING FLASK. International Journal of Computer Science and Mobile Computing 13 (5), 71 75.
- 2. Sarkar, B., Saha, A., Dutta, D., De Sarkar, G., & Karmakar, K. (2024). A Survey on the Advanced Encryption Standard (AES): A Pillar of Modern Cryptography.

#### **FACULTY ACHIEVEMENT**

SI No	Name	Achievement	Certifying Body	
1	Mr. Sumanta Chatterjee	Received Academic Professional Award, 2024	Shaheed Sukhdev College of Business Studies, New Delhi, India in association with National Institute of Technology Patna, and University of Valladolid,	
			Spain.	
2	Mr. Sumanta Chatterjee	JIS Samman 2024 (Faculty with highest numbers of students publications)	JIS GROUP	

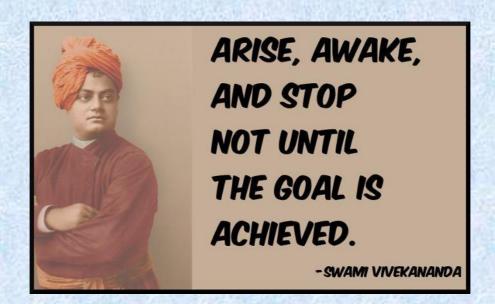


Be not afraid. Think not how many times you fail. Never mind. Time is infinite. Go forward; assert yourself again and again, and light must come.

Wickanan

#### STUDENTS ACHIEVEMENT

SI No	Name of the Student	Achievement	Certifying Body	Date	Link of the Document
1	Shivani Jha	Trophy in JIS samman	JIS GROUP	25-05- 2024	https://drive.google.com /file/d/ 1g6Yb6It1NFV_Nik_W I1Gsq 9fmEdj- F/view?usp=drivesdk



#### **CAMPUS PLACEMENT**

More than 70% students have got opportunities to work in different top software development industries







## PLACEMENT RECORDS 2021 BATCH

SI No	NAME OF THE STUDENT	PLACED AT - 1	PLACED AT - 2	PLACED AT - 3
1	Srijan Seal	Accenture	Capgemini	Cognizant GenC
2	Subhankar Karmakar	SLK Software	Deloitte US	TCS
3	Abhirup Mukherjee	JMAN Digital Services	TCS	
4	Adittya Sekhar Das	Capgemini	TCS	
5	Aditya Kumar Gond	TCS		
6	Aditya Sengupta	Cognizant GenC		
7	Agnibha Maity	Capgemini		
8	Akash Mondal	Edvedha Edutech Pvt Ltd	CLK C+ (I	
9	Aman Pathak	ApMoSys Technologies	SLK Software	
10	Amit Mondal	TCS		
11	Anik Sarkar	Capgemini		
12	Aniket Adhikary	Capgemini		
13	Anindita Paul	TCS		
14	Anshu Singh	LTIMindtree		
15	Antara Das	Persistent	Cognizant GenC	
16	Aradhya Rai	ApMoSys Technologies		
17	Arundhati Ghosh	Accenture		
18	Atik Pal	ARC Document Solutions India Pvt. Ltd.		
19	Avik Saha	TCS		
20	Ayantika Pal	Accenture		
21	Bidisha Baidya	Edvedha Edutech Pvt Ltd	Cognizant GenC	
22	Bishal Biswas	Capgemini		
23	Boby Mourya	Rinex Technologies Private Limited		
24	Chirag Chakraborty	Cognizant GenC		
25	Chirasree Bhattacharyya	TCS		
26	Debanjan Dutta	TCS		
27	Debashis Barman	Virtuous Techlogic	Mindtide LLC	
28	Deep Saha	Mocero Health Solutions		
29	Deepak Kumar Thakur	Rinex Technologies Private Limited		
30	Dinika Das	TCS		
31	Dona Roy	Capgemini		
32	Dona Saha	TCS		
33	Hrishikesh Kushawaha	Prolifics	TCS	
34	Jayantika Roy	Accenture	TCS	
35	Manish Mondal	Capgemini		
36	Mayank Kumar Singh	Rinex Technologies Private Limited		
37	Mishu Debnath	TCS		

SI No	NAME OF THE STUDENT	PLACED AT - 1	PLACED AT - 2	PLACED AT - 3
38	Nandini Saha	My Job Grow	TCS	
39	Parnajit Majumder	Accenture		
40	Prasun Sarkar	Accenture		
41	Pritam Dey	Accenture		
42	Priyanjana Das	Marble Box	TCS	
43	Priyanka Chakraborty	Edvedha Edutech Pvt Ltd		
44	Raisa Ghosh	Accenture		
45	Rashmi Kumari	Rinex Technologies Private Limited		
46	Ritoja Banerjee	Rinex Technologies Private Limited	TCS	
47	Rivu Chowdhury	TCS		
48	Rohan Debnath	Accenture		
49	Rohan Kundu	Rinex Technologies Private Limited		
50	Rohit Kumar Singh	LTIMindtree		
51	Rohit Ray	Capgemini		
52	Romit Saha	Capgemini	TCS	
53	Rupayan Roy	Accenture		
54	Samiran Basu	TCS		
55	Samiran Pradhan	Capgemini		
56	Sanket Bose	Rinex Technologies Private Limited	Capgemini	
57	Saptaneel Chakraborty	LTIMindtree		
58	Saptarshi Karmakar	Cognizant GenC		
59	Sarbani Sarkar	TCS		
60	Satyajay Behuria	Capgemini	TCS	
61	Shibam Dutta	TCS	. 33	
62	Shibam Nandi	My Job Grow	TCS	
63	Somnath Biswas	My Job Grow		
64	Soujit Das	SAP LAB	Accenture	
65	Soumalya Das	Rinex Technologies Private Limited	Capgemini	
66	Soumyaa Chakraborty	LTIMindtree		
67	Souvik Midya	TCS		
68	Srijeeta Dutta	Linde		
69	Subhasish Sasmal	TCS		
70	Subhranil Das	Capgemini		
71	Sumana Barma	TCS		
72	Tathagata Dey	Accenture		
73	Yogesh Kumar Singh	Capgemini		



(An Autonomous Institute)
Department of Computer Science & Engineering

#### WEBINAR: "Recent Trends in Al Applications"

<u>Date of Program –</u> on 9th April, 2024. 3:30 pm onwards

#### Organized By-

Department of CSE, JIS College of Engineering

#### About The Program -

A webinar on "Recent Trends in AI Applications" was organized by the Department of CSE, JIS College of Engineering from 3:30 pm onwards on 9th April ,2024. MS. SRABANTI

CHAKRABORTY was invited as an eminent speaker.

More than 100 participants from faculty, researchers, and students' communities were present. The program

was coordinated by Mr. Sumanta Chatterjee, president of the alumni association of Dept. of CSE and Ms.

Trisha Bera, Assistant professor Dept of CSE. The program started with the welcoming address by the Head

of Dept. of CSE, Prof. Dr. Bikramjit Sarkar.

A small token of appreciation was conveyed to the speaker by respected assistant professor of Dept. of CSE,

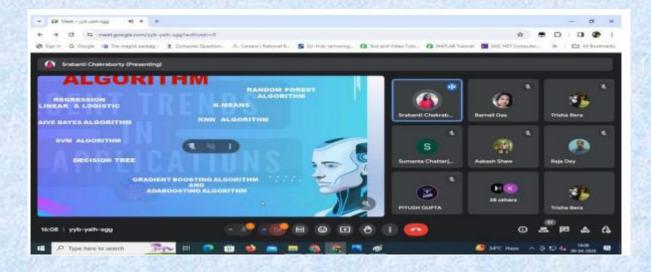
Mr. Sumanta Chatterjee and other faculties also joined.

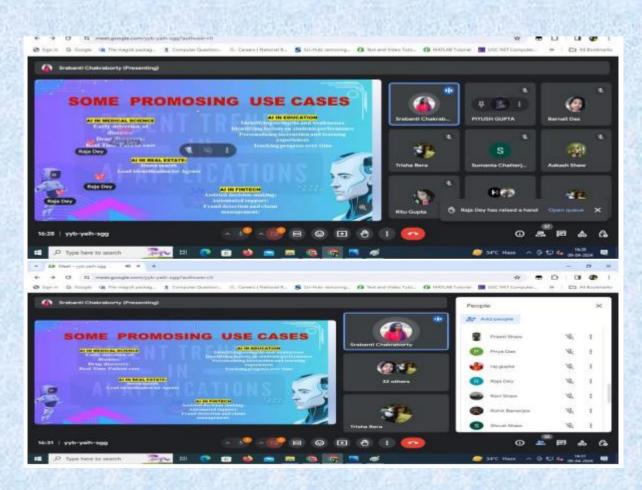
The program concluded with the vote of thanks given by the respected faculty member of Dept. of CSE Asst.

prof. Ms. Trisha Bera and Mr. Sumanta Chatterjee.

#### **Event Detail**

# WEBINAR: "Recent Trends in Al Applications"







(An Autonomous Institute)
Department of Computer Science & Engineering

WEBINAR: "Front-End Frontier: Navigating Road Map and Riding the Trends in Modern Web Development"

#### Date of Program - on 9th

24th February ,2024.4 pm onwards

#### Organized By-

Department of CSE, JIS College of Engineering

#### About The Program -

A webinar on "Front-End Frontier: Navigating Road Map and Riding

the Trends in Modern Web Development" was organized by the Department of CSE, JIS College of

Engineering from 4 pm onwards on 24th February ,2024. Mr. Souvik Banerjee was invited as an eminent

speaker.

More than 100 participants from faculty, researchers, and students' communities were present. The program

was coordinated by Mr. Sumanta Chatterjee, president of the alumni association of Dept. of CSE and Ms.

He explained everything by a small but very informative presentation. He explained everything about

Modern Web Development, the evolution of Front-End Development, and showed us a what are steps of

Web Page Developing, explain how different software work to create different Types of web pages. He had

also discussed what are the job opportunities for this.

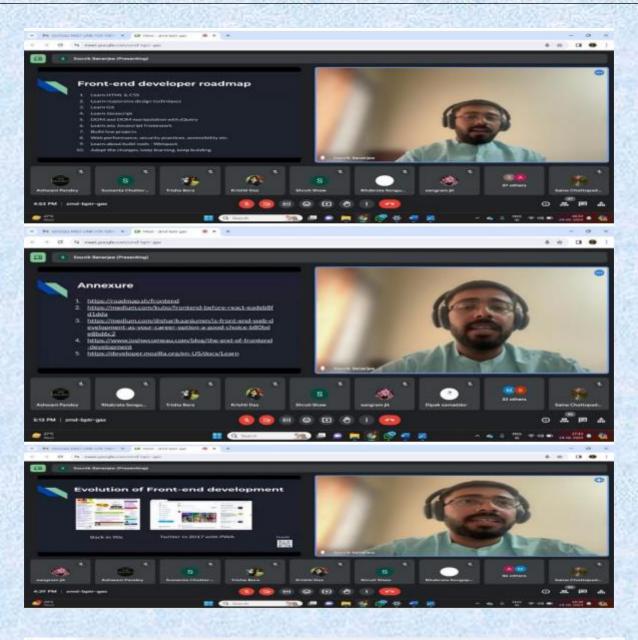
Also, there was a question-answer session where audience questions were asked and answered by the expert.

A small token of appreciation was conveyed to the speaker by respected assistant professor of Dept. of CSE,

Mr. Sumanta Chatterjee and other faculties also joined.

The program concluded with the vote of thanks given by the respected faculty member of Dept. of CSE Asst.

prof. Ms. Debashree Mitra.







# (An Autonomous Institute) Department of Computer Science & Engineering

# Memorandum of Understanding (MOU) Signing and Cyber Security Workshop

Date of Program - 15th

March, 2024

Venue - JISCE

Kalyani

#### About The Program -

On 15th March, 2024, JIS College of Engineering and Cyber Dojo came together to sign a Memorandum of Understanding (MOU), symbolizing a promising collaboration in the domain of cybersecurity. The ceremony, held at [insert venue], was graced by the presence of Principal Prof. Partha Sarkar from JIS College of Engineering and Mr. Jay A Raval, Director of Cyber Dojo.

This MOU signifies not only a formal partnership between the two institutions but also a commitment to advancing cybersecurity education and research. This workshop provided participants with invaluable insights into various facets of cybersecurity, including threat intelligence, ethical hacking, secure coding practices, network security, and risk management. Led by Mr. Jay A Raval and experts from Cyber Dojo, the workshop was highly interactive, featuring demonstrations, case studies, and practical exercises.















# (An Autonomous Institute) Department of Computer Science & Engineering

event "One day workshop on Networking and cyber security"

#### **Date of Program**

15th March, 2024 <u>Venue</u> – JISCE Kalyani

#### About The Program -

Department of Computer Science and Engineering, JISCE, has organized one workshop on Networking and cyber security on 15 March 2024, 2 pm onwards. The venue of the event was B.C.Roy auditorium. More than 100 students have participated in the session along with all faculty members of the CSE department. Speaker of the session was Mr. Jay Raval, the founder member of Cyber Dojo, a leading company in the cyber security. In this interactive session, students were enjoying the question answer phase, they found their

interested part in networking







# (An Autonomous Institute) **Department of Computer Science & Engineering**

#### Workshop on "Cyber Security"

#### **Date of Program**

25th April 2024

#### Organized by -

Department of

Computer Science and

Engineering (CSE), CST

& CSE (AI & ML) at

JIS College of

Engineering

Convenor: Dr. Partha

Sarkar, Principal, JIS

College of Engineering

**Coordinator:** Ms.

Jayshree Bhattacharya

Speakers: Mr. Jay A

Raval (Cyber Dojo) &

Harsh A Raval (Cyber

Dojo)

The One Day Workshop on Cyber Security, organized by the Department of Computer Science and Engineering (CSE), CST & CSE (AI & ML) at JIS College of Engineering, was held on 25th April 2024. The workshop aimed to provide participants with insights into the latest trends, challenges, and best practices in the field of cybersecurity.

Event Overview: The workshop commenced with an introduction by Dr. Partha Sarkar, Principal of JIS College of Engineering, who emphasized the importance of cybersecurity in today's digital age. Following the introduction, Ms. Jayshree Bhattacharya, the coordinator of the event, provided an overview of the agenda for the day.

- 1. Keynote Address by Mr. Jay A Raval & Harsh A Raval: The workshop featured enlightening sessions by renowned cybersecurity experts, Mr. Jay A Raval & Harsh A Raval, founder of CyberDojo. They shared their extensive knowledge and experience in the field, covering topics such as emerging cyber threats, data breaches, and strategies for safeguarding digital assets.
- 2. Interactive Workshops: Participants had the opportunity to engage in interactive workshops where they learned practical skills related to cybersecurity. These workshops covered areas such as threat detection, incident response, and ethical hacking techniques.
- 3. Panel Discussion: A panel discussion was held to facilitate dialogue among participants and experts on current cybersecurity challenges and potential solutions. The panelists addressed various questions raised by the audience, providing valuable insights and perspectives.

  Outcome: The One Day Workshop on Cyber Security proved to be a highly informative and engaging event, providing participants with valuable knowledge and practical skills to enhance cybersecurity practices. The event was successful in achieving its objective of raising awareness and fostering collaboration in the field of cybersecurity.







(An Autonomous Institute)

Department of Computer Science & Engineering

"JALA CHHATRA" – a noble initiative taken by the departments of CSE, CST and CSE (AIML) on May 02, 2024

#### Date of Program -

2nd of May, 2024

#### Organized by

CSE and
CST(AI/ML),
JISCE, Kalyani

#### About The Program -

The primary objective of "JALA CHHATRA" is to assuage the discomfort of passers-by and pedestrians by dispensing water infused with Glucose (Glucon-D), a respite particularly pertinent amidst the relentless onslaught of summer's blistering fervour. With temperatures soaring to unprecedented heights, registering a scorching zenith of 43 degrees Celsius, the imperative for pre-emptive measures cannot be overstated.

















