UDBHABON@KGP
COMPUTING CONVERSATIONS
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR



A message from the Head

It is my pleasure to present the inaugural issue of Udbhabon, the quarterly newsletter of the Department of Computer Science and Engineering, IIT Kharagpur. True to its name, Udbhabon reflects the spirit of innovation, creativity, and progress that defines our department.

The Department of CSE has a proud legacy of excellence in education, research, and societal impact. Our faculty, students, staff, and alumni together contribute to cutting-edge research, impactful industry collaborations, and successful entrepreneurial ventures. This newsletter is envisioned as a platform to highlight these achievements and to document the evolving journey of our community. We would like to particularly engage with our alumni through this newsletter, and we welcome alumni updates to be shared with the editorial team for possible inclusion in future editions.

I congratulate the editorial team for bringing out this inaugural issue and encourage the entire CSE community to contribute to making Udbhabon a vibrant and inclusive forum.

With best regards,

Prof. Niloy Ganguly
Head of the Department



TOP NEWS

Capillary Technologies has been listed in the Bombay Stock Exchange (BSE)

Co-founded by CSE alumni Krishna Kumar Mehra (B. Tech/CSE/2006).

The department has received INR ~4 Cr research funding in between Aug-Nov 2025

Major funding from DRDO, Azure, Google Research and Turing Global.

Dr. Anand Deshpande has joined the department as Distinguished Visiting Professor

Dr. Deshpande is the Founder, Chairman and Managing Director of Persistent Systems.

Awards and Recognitions (Faculty)



Prof. Sudeshna Sarkar has been appointed as the AVLN Rao and Tulasi Ramalakshmi Aluru Chair Professor.



Prof. Niloy Ganguly has been elected as a Fellow of the National Academy of Sciences India (NASI). He has also been appointed as the Surojit & Sanchayita Chair Professorship.



Prof. Animesh Mukherjee has been elected as the fellow of Indian National Academy of Engineering (INAE).



Prof. Sandip Chakraborty has received the Faculty Excellence Award 2025 (Associate Professor).



Prof. Saptarshi Ghosh has received the Faculty Excellence Award 2025 (Associate Professor). He has also been elected as the Fellow of the West Bengal Academy of Science & Technology (WAST).



Prof. Sudip Misra has received the Institute Chair Professorship 2025.

Awards and Recognitions (Students)



Ms. Ipsita Koley, a recently graduated CSE PhD student (Soumyajit Dey) was awarded the **ACM SIGBED Frank Anger Memorial award in 2024**, a global recognition for PhD level researchers in the area of Embedded and Real Time systems



An undergraduate student team, known as libbabel.so, consisting of Imad Farooque (3rd Year), Tegan Jain (3rd Year), Vaibhav Raj (3rd Year), and Jinansh Dalal (2nd Year), has proudly achieved third place in the ***H7CTF* 2025**, a 36-hour global cybersecurity challenge.



Two research scholars from the department, Ms. Anushmita Ghosh and Mr. Sagnik Ghosh, has received **TCS Research Scholar Program (RSP) scholarships** (Cycle 19 – 1st July 2025 to 30th June 2029) from Tata Consultancy Services.



Major Funded Projects (Received between Aug-Nov 2025)

- **Building a Dataset to Advance Reasoning in Large Language Models,** received INR 28 Lakhs funding from Turing Global India Private Limited, PI: Prof. Niloy Ganguly, Co-PI: Prof. Abhijnan Chakraborty
- **From DALTON to Living Labs: Scalable, Inclusive, and Explainable AI for Indoor Air Quality and Behavioral Change,** received USD 100,000 award from Google Research through their Society-Centered AI initiatives. PI: Prof. Sandip Chakraborty
- **Agentic Verifiers: Provably Safe Test-time scaling for Reasoning Models** was selected to receive an Azure AI grant amounting USD 206000 Azure + USD 20000 unrestricted cash as part of the Agentic AI Research & Innovation initiative (AARI), PI/Co-PIs: Prof. Somak Aditya, Prof. Sourangshu Bhattacharya, Prof. Uma Satya Ranjan (IIT Jammu)
- **Secure and Intelligent Indigenous Network Packet Processor on Field Programmable Gate Array with Hardware-Based Stateful Firewall for Real-Time Intrusion Detection/Prevention**, received INR 261 Lakhs funding support from Directorate of Futuristic Technology Management (DFTM), Defence Research and Development Organisation, Ministry of Defence, PI: Prof. Rajat Subhra Chakraborty

Alumni Achievements

Capillary Technologies, co-founded by our alumnus **Krishna Kumar Mehra** (B. Tech/CSE/2006), on its recent listing in the Bombay Stock Exchange Limited (BSE). Over time, several of our alumni have significantly contributed to Capillary's journey. **Subrat Panda** (B. Tech/CSE/2002 and PhD/CSE/2009), **Piyush Goel** (Sual/CSE/2008) and **Pravanjan Choudhury** (PhD/CSE/2011) played key technical leadership roles during its evolution, while **Peeyush Ranjan** (B. Tech/CSE/1995) continues to contribute at the highest strategic level as a member of the Board of Directors.



New Facilities & Infrastructure

- The construction of the **new floor (third floor)** at the Annex building is now complete which can host multiple research labs, faculty offices and other facilities for the faculties and students of the department.
- The department has facilitated **a new server room** at the Takshashila building for hosting additional computing servers.





CodeClub: The Dep Society

CodeClub has successfully organised the **IICPC Global Codefest**, a national level competitive programming and computer science examination cum recruitment contest, in collaboration with leading global quantitative trading and technology firms.





Seminars @ CSE

- **Dr. Anand Deshpande**, Founder, Chairman and Managing Director of Persistent Systems, "*If AI Does Everything, What Should the Rest of Us Do?*"
- **Dr. Sanchari Das**, George Mason University, USA, "*Human-Centered Approaches to Privacy & Security for Empowering Marginalized Users*"
- **Prof. Supratik Mukhopadhyay,** Lousiana state University, USA, "*Artificial Intelligence for Drug Discovery and Environmental Sciences*"
- **Prof. Kalyanmoy Deb,** Michigan State University, USA, "*Machine Learning Assisted Evolutionary Multi-Criterion Optimization*"
- **Dr. Abhranil Chatterjee**, IIT Kanpur, "*Algebra Powers Computation*"
- **Dr. Arpit Narechania**, Hong Kong University of Science and Technology (HKUST), "*Human-Centric AI Guidance for Visual Analytics*"
- **Prof. Sandeep Juneja** (Founding Director, Safexpress Centre for Data, Learning & Decision Sciences, Ashoka University, "*Fluid approach to a few pure explorations of multi-armed bandit problems*"
- **Prof. Dilip Sarkar** , University of Miami, USA, "*Neural Collapse Inspired Metrics for Deciphering DNN Classifiers and Their Applications*"
- **Dr. Soumen Basu**, Meta, New York, "*Gallbladder Cancer Detection from Ultrasound Using Curriculum and Self-Supervised Learning*"
- **Prof. Chandrasekaran Pandurangan**, IISc Bangalore, "*Joy of Divide and Conquer*"
- **Prof. Prasenjit Mitra**, CMU Africa, "*Resource-Limited Language Modeling: Compression, Pruning, and Training Set Selection*"
- **Dr. Tathagata Srimani**, CMU, USA, "*From Devices to Systems: Monolithic 3D Integration for Future AI Hardware*"







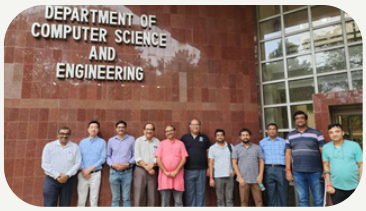




Outreach@CSE



Dr. Seid Muhie YIMAM (Technical Lead, University of Hamburg – HCDS) and **Robert Geislinger** (Research Associate, University of Hamburg – HCDS) visited the department from October 3 to November 3, 2025, as part of a SPARC-funded project "Deep Neural Multilingual Models to Combat Online Hate Content" (PI: Prof. Animesh Mukherjee)



A two-member team from **Samsung Electronics Korea** visited the department to explore potential collaborations and research opportunities in advanced computing domains.



On November 4, 2025, the department hosted a delegation from **various Japanese companies as part of the India–Japan Talent Bridge initiative**. The visit provided an excellent platform for students and faculty members to interact with industry representatives on diverse topics -- including career opportunities, industry–academia collaboration, and joint research possibilities.



Turing (https://www.turing.com), a fast-growing AI company based in San Francisco, California, has entered into a strategic partnership with the department. The collaboration aims to advance the reasoning capabilities of large language models (LLMs), enabling more reliable, and human-aligned AI systems.



The department successfully conducted the first phase of the 6-month hybrid **AICTE QIPPG Certificate Course** on "Applications of Artificial Intelligence" from June 16 - 27, 2025.



A 10-Day Workshop on Advanced Artificial Intelligence and Machine Learning has been conducted at the department from 2nd to 11th June 2025, in collaboration with **Indian Oil Corporation Ltd. (IOCL)**.

Research Recognitions

- "**LeSICiN: A Heterogeneous Graph-Based Approach for Automatic Legal Statute Identification from Indian Legal Documents**" (published in AAAI 2022) authored by PhD student Shounak Paul, and the faculty members Pawan Goyal and Saptarshi Ghosh, has received the Markose Thomas Memorial Award 2023.
- "**Contrast and Mix: Temporal Contrastive Video Domain Adaptation with Background Mixing**" (published in NeurIPS 2021), authored by Aadarsh Sahoo, Rutav Shah (who had been the undergraduate students at the department) and faculty member Abir Das along with his collaborators, has received the Markose Thomas Memorial Award 2023.
- Prof. Debdeep Mukhopadhyay and his team has received for the Best Workshop Paper Award at the **6th ACNS Workshop on Artificial Intelligence in Hardware Security (AIHWS),** held in Munich, from June 23-26, 2025.

Faculties Joined



Dr. Anand Deshpande
Distinguished Visiting Professor,
Founder, Chairman and Managing Director of Persistent Systems

Faculties Superannuated

Prof. Pallab Dasgupta
Joined Synopsys as Head of Formal Verification Research



Editorial Team: Prof. Sandip Chakraborty, Prof. Jibesh Patra. Please forward any feedback/news/comments regarding the newsletter and alumni updates to newsletter@cse.iitkgp.ac.in.