



Dr. Sajal Saha

Professor (CSE) | Associate Dean (SOET) | Founding Director, Centre of Excellence in AI
Adamas University, Kolkata, India



SUMMARY OF KEY ACHIEVEMENTS

Professor (CSE), Founding Director – Centre of Excellence in AI (established with Amazon Web Services) and Associate Dean (SOET), Adamas University, with 22+ years of experience in academia, academic leadership, research, innovation and industry consultancy. PhD (Tech) from NIT Durgapur; former Principal, Meghnad Saha Institute of Technology and Dean, School of Computing Sciences, Kaziranga University.

22+ Years	₹84.25 Lakhs	₹10.57 Lakhs	11 IPs
Teaching, Research & Leadership	Research Funding (16 Projects)	Consultancy (9 Projects)	7 Patents (3 Granted) + 4 Copyrights
53 Publications	26 Scopus Indexed	5 Books	9 PhD Scholars
Journals, Conferences & Chapters	Publications	incl. Routledge (Taylor & Francis)	5 Awarded, 4 Ongoing

Leadership & Institution Building

- **Academic Leadership:** Associate Dean (SOET), Director (CoE in AI), HOD-CSE and Director, Product & Innovation at Adamas University, scaling CSE from 150 to 3,500 students (2022–26) and launching industry-partnered specialisations with AWS, HCL GUVI and SAP; Principal, MSIT; Dean (Computing Sciences and Research), Kaziranga University.
- **Governance:** Chairman, Board of Studies (CSE), Adamas University; member of IQAC and Academic Council; handled NBA, NAAC, NIRF, ARIIA, AICTE and UGC compliance.
- **Industry Partnerships:** Established AWS Academy, Oracle Academy, IBM ICE and Infosys Campus Connect programmes; collaborations with Emory University (USA), AIT Bangkok, and the Universities of Huelva and Alicante, Spain (2026).

Research & Innovation

- **Funded Research:** PI/Co-PD on projects funded by ICSSR, AICTE (MODROBS, STTP, RPS), NVIDIA, IEEE, IIC and Adamas University seed grants, including ICSSR projects of ₹23.80 lakhs and ₹16 lakhs.
- **Endangered Language AI:** As Co-PD of the ICSSR-funded (₹23.80 lakhs) Toto-Bangla-English project, developed a dedicated GPT for the Toto-speaking community to archive and revitalise this endangered West Bengal language; corpus research published (2025). The project is cited on [Wikipedia's "Toto language" article](#). [Project details](#)
- **Intellectual Property:** 3 granted patents (Intelligent Dustbin, Soil Moisture Monitoring, IoT Full-Body Sanitization) and 4 further published patents in AI/IoT.
- **International Consultancy:** Delivered CRM, web and AI consultancy for clients in Canada and India.

Awards & Recognition

- **Smart India Hackathon 2024 – Winner** (mentor), Ministry of Jal Shakti, ₹1,00,000 prize, from 86,000+ teams.
- **Outstanding Achievers Award 2024**, Adamas University, ₹2,00,000 prize for highest admissions in SOET.
- **Young Innovators Award 2024** (mentor), TATA Social Enterprise Summit, IIM Kolkata; NVIDIA Hardware Grant (₹2.15 lakhs).
- **Other Awards:** First Prize, ACM HACK-A-DAY Faculty Hackathon 2022; Best Paper Award, ICSVCE-2021; Silver Medal, ME (WBUT), DGPA 9.22.

Professional Standing

- **Memberships:** Senior Member IEEE; Fellow IETE; Member ACM, CSI and ISoC.
- **Certifications:** IBM Enterprise Design Thinking (Practitioner, Co-Creator, AI), AWS Academy Certified Educator, Dale Carnegie Certified Trainer.
- **Academic Service:** PhD external examiner (Pune University, MAKAUT, Assam Down Town University); Mentor of Change, Atal Innovation Mission (NITI Aayog); 68 invited talks and keynotes (including Spain, Philippines and Bhutan).

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Vidwan id: 125653

Education

Degree	University / Board	Year
PhD(Tech)	National Institute of Technology, Durgapur	2016
ME(Information Technology)	Maulana Abul Kalam Azad University of Technology(formerly WBUT)	2007
MCA	Sikkim Manipal University of Health Medical and Technological Science	2004
B.Sc (Honours in Physics)	Calcutta University	2001
12 th	West Bengal Council of Higher Secondary Education	1997
10 th	West Bengal Board of Secondary Education	1995

Global Certification

1. IBM Certified Enterprise Design Thinking Practitioner
2. IBM Certified Enterprise Design Thinking Co-Creator
3. IBM Certified Enterprise Design Thinking Team Essential for AI
4. AWS Academy Certified Educator
5. Dale Carnegie Certified Trainer for High Impact Teaching Skills.

Visiting Faculty

1. NIT Nagaland from February 2018- May 2018
2. Kaziranga University from March 2022 till date.

Employment History

Organization	Designation	Period		Duration
Adamas University Professor(CSE Dept.)		2025-till date	Director, Centre of Excellence in AI	
		2025- till date	Associate Dean, SOET	
		2022-2025	HOD-CSE ,Director, Product & Innovation	4+ years
Meghnad Saha Institute of Technology, Techno India	Principal	2021-2022	Principal	7 Months
Kaziranga University, Jorhat, Assam	Professor(CSE Dept.)	January 2021-September 2021	Dean, School of Computing Sciences 2019-2021	5.5 years
Kaziranga University, Jorhat, Assam	Associate Professor (CSE Dept)	2021-2022	Dean, Research 2019-2021	
			Associate Dean, Compliance. 2017-2019	
Narula Institute of Technology, Kolkata	Assistant Professor(Grade II)	2010-2016		6 years

	Senior Lecturer	2009-2010		1 year
	Lecturer	2004-2009		4 years 10 months
ISRO, Regional Remote Sensing Service Centre, IIT Campus, Kharagpur	Project Trainee	January 2004 to May 2004		5 months
Total				22 years+

Patents/Copyright

	Title of invention	IP	Application No	Date	Status
1	Ultra Safety Helmet	Patent	201731028497	28.04.18	Published
2	An Intelligent Dustbin	Patent	201831024232	20.07.18	Granted
3	A System to Monitor Moisture Level in the Soil	Patent	201831040250	16.11.18	Granted
4	IOT Based Full Body Sanitization System	Patent	202131028764	16.07.21	Granted
5	An innovative web application for human psycho-emotional data acquisition to generate users emotional signature pattern (ESP)	Copyright	SW-14789/2021	14/7/2021	Registered
6	Cognitrack Innovative Attendance Management System With Real Time Student Count And Percentage Analytics	Copyright	SW-18740/2024	26.02.24	Registered
7	OutlierIQ: A Web Application For Detection of Anomalies in IoT Data Using Clustering Technique	Copyright	16709/2024-CO/SW	24.05.24	Applied
8	Voice Controlled Device For Playing Vedic Scripture Audio For Visually Impaired Users, And Method Thereof	Patent	202531001347	17.01.25	Published
9	Scrapit: Automating The Web Scrapping Process For Everyone	Copyright	1790/2025-CO/SW	16.01.25	Registered
10	A Smart Safety System for Two-Wheeler Riders and Method Thereof	Patent	202531056641	15.07.25	Published
11	Artificial Intelligence Assisted Crop Irrigation Monitoring System and Method Thereof	Patent	202631082130A	24.07.26	Published

Research Funding Details

	Title of the Project	Funding Agency	Duration	Amount	Status	My Role
1	KRISHINETRA: A Solar-Driven Edge Bio-Surveillance Rover for Real-Time Crop Disease Triage, Weed Micro-Intervention, and Field Biodiversity Mapping in Indian Agriculture	Adamas University	12 Months (2026-27)	1.75 lakhs	Ongoing	Co-PI
2	Living Heritage, Public Memory and Civilizational Consciousness: Reconstructing the Hooghly Heritage Corridor through Textual Documentation and AR/VR-Enabled Digital Restoration	ICSSR	2 Years (2026-28)	16 lakhs	Ongoing	Co-PD
3	Unified Web Infrastructure for Multidisciplinary Research Centre	Adamas University	1 Year (2026)	2.10 lakhs	Ongoing	PI
4	Building Inclusive Digital Solution: AI, Ethics, and Beyond	AICTE	6 Months (2025)	2 lakhs	Completed	Coordinator
5	Progress Track: A comprehensive PhD Program Management Platform for Enhanced Quality and Efficiency	Adamas University	1 Year (2025)	1.65 lakhs	Completed	PI
6	Workshop on “STEM/Disaster Awareness”	IEEE	1 Day (2024)	0.25 lakhs	Completed	Coordinator

7	Artificial Intelligence and Machine Learning in Robotics	NVIDIA	1 Year (2024)	2.15 lakhs	Completed	PI
8	Developing an AI Based Toto-Bangla-English Trilanguage Learning Application: A Step Towards Digital Archiving of the Endangered Toto Language of West Bengal	ICSSR	21 Months (2024-25)	23.80 lakhs	Completed	Co-PD
9	Development of a High-Resolution Brain Generated Event Related Potential Recorder (BRAIN CAP)	Adamas University	1.5 Years (2023-24)	15.57 lakhs	Completed	PI
10	Developing Metacognitive Awareness, Critical Thinking Ability, and Prediction System through ICT based Language Learning Application: A Case Study of Dormant English as Second Language Learners	Adamas University	2 Years (2023-24)	2 lakhs	Completed	Co-PI
11	Augmentation of Multimedia lab with AR/VR facilities for engineering content creation	AICTE MODROBS	1 Year (2021-22)	9.03 lakhs	Completed	PI
12	STTP on "Recent Advancement in Artificial Intelligence and Machine Learning"	AICTE STTP	6 Months (2021)	3 lakhs	Completed	PI
13	Institute Innovation Council Mentor Mentee Scheme	IIC	1 Year (2021-22)	2.25 lakhs	Completed	Coordinator
14	IoT Enabled Safety Glass (student project)	ASTEC	6 Months (2020-21)	0.10 lakhs	Completed	Mentor
15	Ultrasonic Sensor Gloves or Shoes for the Blind using Arduino LilyPad (student project)	ASTEC	6 Months (2019-20)	0.10 lakhs	Completed	Mentor
16	Handoff Analysis in WLAN-GPRS Integrated Network	AICTE RPS	2 Years (2010-12)	2.5 lakhs	Completed	PI
			Total	84.25 lakhs		

Consultancy

Sl. No.	Title of the Project	Client Name	Duration	Amount	Status
1	Website Layout and Logo Design	Zeneeda.com	1 Week	₹17,700	Completed
2	Design and Online Store in WordPress with Integration of Payment Gateway	GRUVBOX Kitchen LLC Canada	8 Weeks	USD 4000 ~ ₹3,60,000	Ongoing
3	Configuration and Designing Four Websites in WordPress	152376637 INC Canada	4 Weeks	CS\$1000 ~ ₹67,000	Ongoing
4	Configuration of CRM using ZOHO	152376637 INC Canada	8 Weeks	CS\$2000 ~ ₹1,38,000	Ongoing
5	Design Configuration and Single User Deployment of ZOHO CRM	Vindow Canada	4 Weeks	US\$3,000 ~ ₹1,96,000	Completed
6	Deliver Courses: Generative AI for Business Productivity and Growth for EEPC India	Reason Analytics Softech India Pvt. Ltd	1 Week	₹59,000	Completed
7	Pose Estimation and Tracking of Hairstyles in AR Platform	Design X Futuristics	—	60:40 as per actual	To be updated
8	Implementation of Employment Report Generation using Agentic Token	152376637 INC Canada	4 Weeks	CS\$1500 ~ ₹1,00,000	Ongoing
9	Design, Development, Testing, Deployment, and Documentation of Laravel-based Client Management System	152376637 INC Canada	8 Weeks	CS\$2000 ~ ₹1,38,000	Ongoing
			Total	10.57 lakhs	

PhD Supervision

	Name of the scholar	Topic	University	Registered on	Status
1	Mr. Ayan Chakraborty	Identification and Analysis of Human Psycho-Emotional Pattern Within Controlled Stimuli by Cognitive and Adaptive System	Kaziranga University	2018	Awarded
2	Mr. Shiladitya Munshi	Design & Development of Real-Time Big Data Processing model	Kaziranga University	2018	Awarded
3	Mr. Swagata Paul	Methods of Attack Detection in Nodes of Big Data System	Kaziranga University	2018	Awarded
4	Mr. Chinmoy Bharadwaj	A Study on QoS analysis and optimization in Edge Networks	Kaziranga University	2017	Awarded
5	Ms. Kaveri Banerjee	Smart Contract Solution Based on Blockchain for Healthcare Data Management	Adamas University	2021	Ongoing
6	Mr. Prabhat Das	Development of Optimal Approach towards IOT data analysis using clustering techniques	Kaziranga University	2022	Awarded
7	Mr. Siddhartha Datta	Blockchain Technology for Optimisation of Supply Chain Management in Indian Armed Forces	Adamas University	2023	Ongoing
8	Mr. Supriyo Pal	Optimizing Efficiency and Sustainability in Smart Solid Waste Management Systems	Adamas University	2023	Ongoing
9	Mr. Komol Pal	A Systematic Approach to Generating Structured Prompts for Unbiased LLM Output	Adamas University	2025	Ongoing

Awards and Recognition

1. A team comprising Vidisha Das, Arpita Das, Shubhojit Mondal, Mohammed Riyaz Alam, Subhankar Pramanik, and Amit Kumar Duya, under the mentorship of Dr. Sajal Saha, won the Smart India Hackathon 2024 with PID1571 under the Ministry of Jal Shakti. They secured a cash prize of ₹1,00,000. The Grand Finale was held at Galgotias University from 11th to 16th December 2024, with over 86,000 teams participating.
2. Received the Outstanding Achievers Award, along with a cash prize of Rs. 2,00,000 (2 lakhs), during Adamas Achievers Day at Adamas University on 05.10.24 for achieving the highest admissions in the School of Engineering and Technology for the 2024-25 session.
3. Ms. Sneha Bhowmik, Mr. Abhishek Bhowmik, Md. Sohail Irfan guided by Dr. Sajal Saha, have won the Young Innovators Award, along with a cash prize of ₹20,000, for their project titled “Urban and Remote Logistics through Autonomous Drone Network” at the TATA Social Enterprise Summit organized by IIM Kolkata on 15th September 2024.
4. Awarded INR 2.15 lakhs of Hardware (NVIDIA Jetson Nano) by NVIDIA through NVIDIA Hardware Grant program 09.09.24.
5. First Prize (INR 25,000) - 36-hour ACM HACK-A-DAY Faculty Hackathon, organized by ACM Kolkata, March 12-13, 2022.
6. Best Paper Award - International Conference on Signal Processing, VLSI Communication and Embedded System (ICSVCE-2021), Bardhaman Engineering College, Hyderabad.
7. Awarded Silver Medal by the Governor of West Bengal - Ranked Second Overall in ME (Information Technology) Examination, WBUT (2007), with a DGPA of 9.22.
8. First Prize - Business Plan Competition 2020, organized by Kaziranga University Entrepreneurship Club.
9. Second Position - Project "Handoff Analysis in WLAN GPRS Integrated Network", ANVESHAN, AIU (Association of Indian University) National Student Research Convention, Pune University, April 9-11, 2008.

Honors

- Chairman, Board of Studies, Department of CSE, Adamas University (2022-till date)
- Advisor, NAAC Committee, IQAC at Ellite College of Engineering (2022 till date)
- PhD external examiner: Pune University (2023), MAKAUT (2024), Assam Down Town University (2025)
- External expert of research advisory committee, MIT World Peace University (2021-22)
- External member-BOS, School of Computing Sciences, Kaziranga University (2022 till date)
- Member, Selection committee: Assam Womens University(2017-18), MIT World Peace University.



OUTREACH ACTIVITIES

- Mentor of Change, Atal Innovation Mission (supported by NITI Ayog) - Mentoring three schools in Assam.
- Mentor, Down Town Venture Labs Foundation in Guwahati, Assam 2024 till date.
- Advisor, Avionx Aerospace Ltd, a startup company founded by alumni of Adamas University that provide defence grade drone solution 2025 till date.
- President, Institute Innovation Council, Kaziranga University - Led the university to top IIC activities in North East region in 2019-20.
- Instrumental in establishing partnerships with AWS Academy and Oracle Academy, providing free access to cloud computing curriculum, cloud services, and software.
- Liaison for research and academic collaborations with Emory University, USA, University of Arkansas at Little Rock and Asian Institute of Technology, Bangkok, Susrut Eye Hospital and Research Centre, AIC SMU-TBI.
- SPOC and Academic Coordinator, KU-IBM ICE program (2016-21).
- Coordinator, IIRS ISRO Outreach Program and NPTEL Local Chapter, Kaziranga University(2016-21).
- Facilitated free access to Urkund plagiarism software through Infilbnet under the Shodhsuddhi scheme, Government of India.
- Configured IRINS portal of Meghnad Saha Institute of Technology and Adamas University
- SPoC, Narula Institute of Technology, Infosys Campus Connect program (August 2013-2016) - Rolled out five batches (350 students).
- Liaison for final year project collaborations with government organizations such as ISRO Kolkata, IIRS ISRO Dehradun, and National Informatics Centre.
- Instrumental in partnering with AWS Educate, providing cloud-enabled infrastructure facility and \$100 credit vouchers for 250 students per semester at Kaziranga University since 2017-2021.
- Participated and mentored groups of undergraduate and postgraduate students of JIS Group in several 2-week education camps at the Asian Institute of Technology, Bangkok, Thailand between 2013 and 2016.

Managerial Responsibilities

- Management of the information and general administrative issues and practices for TEQIP, IIC, NBA, NAAC, NIRF, ARIIA, AICTE, UGC, Niti Ayog (Atal Incubation Mission), INFLIBNET and MHRD respectively.
- Presentation of reports for management as and when required.
- Managing the operating budget, performance analysis and reporting to support decision making.
- Provide expert guidance and leadership to students.

Professional Achievements

Adamas University (2022 – Present)

- Leadership roles: Associate Dean, School of Engineering & Technology and Founding Director, Centre of Excellence in AI (established with AWS); earlier Professor & Head, Department of CSE and Director, Product & Innovation (2022–25).
- Department growth: As Head of CSE, scaled the department's total student strength from 150 to 3,500 in four years (2022–26).
- New programmes: Launched B.Tech CSE specialisations in AI & ML and Cloud Computing (with AWS), Cyber Security (with HCL GUVI), AI & Robotics, Data Science, and Computer Science & Business Systems, plus a specialisation with SAP.
- Global certifications: Made globally recognised industry certifications mandatory for students, improving their industry readiness and employability.
- University automation: Developed several in-house automation platforms, including www.aurdc.com for planning and monitoring faculty research; full portfolio at www.aucse.in/more/dev.
- Cloud and innovation: Configured and deployed public cloud infrastructure with AWS Academy and Oracle Academy, and developed 20+ strategic innovation models to improve student engagement, academic performance and resource use.

MEGHNAD SAHA INSTITUTE OF TECHNOLOGY (2021-22)

- Oversaw comprehensive academic planning and strategy development.
- Implemented a student mentoring system, providing individualized counseling to guide students on their career paths.
- Formulated and established policies and procedures to ensure a well-organized academic environment.
- Configured a transparent research monitoring dashboard in Infilbnet IRINS platform, accessible at <https://msit.irins.org/>.

KAZIRANGA UNIVERSITY(2016-21)



- Dean, School of Computing Sciences (January 2020 - September 2021)
- Dean, Research, Innovation, Incubation and Quality Assessment (January 2019 - September 2021)
- Professor In-Charge, IT Infrastructure & ERP, Kaziranga University (September 25, 2020 - September 2021)
- Head, Department of CSE (September 2017 - December 2017)
- Associate Dean (Compliance), Kaziranga University (February 2017 - January 2019)
- Assistant Registrar (Academics) (July 2016 - August 2018)

Key responsibilities and achievements:

- Supervised faculty and staff, including recruitment, support, and mentoring.
- Fostered a shared vision and strategic plan to promote research and encouraged shared governance.
- Facilitated planning, revision, and implementation of graduate academic program curricula based on stakeholder requirements.
- Established private cloud infrastructure using OpenStack and ESXi Server.
- Created and nurtured a productive, content, and positive work environment for faculty and staff.
- Served as Secretary of the University Doctoral Research Committee.
- Conducted nine Train the Trainer (T3) workshops of three-day duration, organized by IBM at Kaziranga University.

NARULA INSTITUTE OF TECHNOLOGY JIS GROUP(2004-16)

- Participated in 15 AICTE/UGC/Industry-sponsored short-term courses (two-week duration).
- Participated and presented papers in 23 international and national conferences and seminars.
- Managed the conference management system (EasyChair) for the IEEE ICCIA-2011 conference.
- Convener, Internal Quality Assurance Cell, NIT - Prepared and submitted quality assessment reports to UGC.
- Member of the Training and Research Committee for TEQIP Phase II, a World Bank-funded project.
- Official mentor for IBM TGMC projects (2009-11) and trainer for Infosys Campus Connect Program (2008-2016).
- Secretary, Incubation Centre, Narula Institute of Technology - Supported student prototype development, commercialization, and business startups.

Seminar/Conference/Workshop organized

1. Organized a week-long international workshop on **"Multidisciplinary Application of AI in Innovation and Research"** at Adamas University (October 10-14, 2022).
2. Coordinated and served as a resource person for a 15-day summer training program on **"AWS Cloud Certification Training"** for NELIT, Kohima at Kaziranga University (July 7-19, 2021).
3. Organized a one-day international workshop on **"Emerging Trends in Digital Visualization and Mapping 2019"** at Kaziranga University (July 16, 2019).
4. Organized several IEEE-sponsored international conferences, including **ICCIC 2021, NESIDS-2018, ICCACCS 2014, ICCIA-2011, and WoMS-2008**.
5. Coordinated a one-month residential summer program on **"Virtualization, Cloud Computing, Big Data Analytics, and Internet of Things: Towards Smart Governance"** for NELIT, Kohima at Kaziranga University (2018).
6. Conducted 16 IBM Train the Trainer (T3) programs at Kaziranga University (2016-2019).
7. Conducted IBM ICE days on November 15, 2018, and November 23, 2019, at Kaziranga University.

MEMBERSHIP PROFESSIONAL Bodies

1. Senior Member IEEE, IEEE Communication Society, IEEE Computer Society (Membership id: 91145325)
2. Fellow IETE(507014)
3. Member ACM (Membership id: 9595440)
4. Global Member ISoC-Internet Society (Membership id: 257507)
5. Member CSI (Membership id: 2031250005)
6. Associate Member: Indian Cyber Safety and Security Standards(NCSSL)
7. Member International Association of Engineers-IAENG (Membership id:114653)
8. Member International Association of Computer Science and Information Technology-IACSIT (Membership id: 80341449)



Annexure I

Publications

Book	Book Chapter	International Journal	International Conference Proceedings	National Conference Proceedings	Total(except book)	Scopus indexed publication **
5	8	16	25	5	53	26

****List of Scopus indexed publication:** <https://www.scopus.com/authid/detail.uri?authorId=35759621000>

Scopus Author ID: 35759621000

Web of Science Researcher id: [C-5958-2019](#)

Orcid id: <https://orcid.org/0000-0002-7519-2962>

Book

1. Sabyasachi Paul, **Sajal Saha**, "Mobile Penetration Testing: A Hands-On Approach", London, UK: Routledge, Taylor and Francis, 2025. Pages:184, \$120.
2. Goswami, S., **Saha, S.**, Basu, K., & Beed, R. S. (Eds.). "Data Management, Analytics and Innovation: Proceedings of ICDMAI 2025", Volume 1-3. Springer Singapore, Lecture Notes in Networks and Systems. Expected Publication Date: July 7, 2025.
3. **Saha, S.** "Overlay-Integrated Heterogeneous Wireless Networks: Evaluation and Performance Analysis." LAP Lambert Academic Publishing, Germany, ISBN 978-3-659-30946-5, 2024.
4. **Sajal Saha**, Asish K. Mukhopadhyay, A. K. Bhattacharjee. "Mobility Management in IP-Based Network: Framework, Issues and Challenges." LAP Lambert Academic Publishing, Germany, ISBN 978-3-659-69274-1, Total pages: 232, price: \$107, 2015.
5. **Sajal Saha**, Ajoy Mondal. "GIS and Remote Sensing: Applications in Flood Damage Assessment." LAP Lambert Academic Publishing, Germany, ISBN 978-3-8484-3342-1, Total pages: 161, price: \$77, 2012.

Book Chapter

1. P. Das, A. Banerjee, P. Mandal, B. Chakraborty, A. Singh, K. Kovuri, S. Saha, B. Tallapragada, and V. Ganugapati, "*Vulnerabilities in IoT device clusters: Analysing security weaknesses and attack impacts*," in Data-Driven AI: A Multidisciplinary Approach, 1st ed. Boca Raton, FL, USA: CRC Press, 2026, pp. 1–6. **(Scopus)**
2. Bhuyan B.P., Saha S. (2021), "*Selection of Mobile Node Using Game and Graph Theory for Video Streaming Application*". In: Choudhary A., Agrawal A.P., Logeswaran R., Unhelkar B. (eds) Applications of Artificial Intelligence and Machine Learning. Lecture Notes in Electrical Engineering, vol 778. Springer, Singapore. https://doi.org/10.1007/978-981-16-3067-5_24
3. Bharadwaj C., **Saha S.**, Kalita K.K., Mukhopadhyay A.K. (2022) "*An IoT-Based Architecture for Edge Computing to Reduce the Latency and Bandwidth for Streaming Data Application*". In: Mandal J.K., Roy J.K. (eds) Proceedings of International Conference on Computational Intelligence and Computing". Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-16-3368-3_30.
4. Mukhopadhyay A.K., **Saha S.** (2022) "*Handoff Analysis in Overlay Based GTP Tunneled 3G-WLAN Integrated Network*". In: Mandal J.K., Roy J.K. (eds) Proceedings of International Conference on Computational Intelligence and Computing. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-16-3368-3_24
5. **Saha, Sajal**, Alam Mazid, Dey Smita," *Artificially Intelligent Customized Voice Response System: A Framework for Artificially Intelligent Customized Voice Response System Design using Speech Synthesis Markup Language*", in Intelligent Speech Signal Processing, Elsevier Press, Chapter 10, p.p. 175-185.
6. **Saha, Sajal**, Chakraborty, Angana, Mukhopadhyay, AsishK., Bhattacharjee, Anup Kumar, "*WiMAX and Wi-Fi Services through Mobile Networks: Issues on Network Planning, Optimization, and Sustainability*", in **Self-Organization in Future Mobile Communication Systems**(an imprint of IGI Global) USA. Chapter 7, p.p. 163-193.
7. **Sajal Saha**, Asish K Mukhopadhyay Anup K. Bhattacharjee, "*QoS and Mobility Management Issues on next Generation Mobile WiMAX Networks*", in **Broadband Wireless Access Networks for 4G: Theory, Applications, and Experimentation, Information Science Reference** (an imprint of IGI Global) USA, 978-1-4666-4888-3 Chapter 16, p.p. 299-324. Price 235\$.
8. **Sajal Saha**, Asish K Mukhopadhyay, "*Mobility Management Issues for Next Generation Wireless Networks*", in **Network and Traffic Engineering in Emerging Distributed Computing Applications, Information Science Reference** (an imprint of IGI Global) USA, ISBN 978-1-4666-1888-6, Chapter-10, p.p. 247-274, price: 183\$.

9. **Saha, Sajal**, Chakraborty, Angana, Mukhopadhyay, AsishK., Bhattacharjee, Anup Kumar,” *Mobile WiMAX Physical Layer Optimization and Performance Analysis Towards Sustainability and Ubiquity*”, in Information Systems Design and Intelligent Applications(Springer lecture notes in Information Systems Design and Intelligent Applications) pp 101-111 **Volume 339**.

International Journal

10. P. Das, D. J. Bora, S. Saha, C.-C. Lee, and H. Mazumdar, “A resilient BIRCH-based smart framework for real-time IoT data clustering,” *Computer Modeling in Engineering & Sciences*, 2026, doi: 10.32604/cmes.2026.079203. **(Q1, SCI, IF:2.5)**
11. A. Guha, S. Saha, D. Ballav, S. Mitra, and H. Chakraborty, “Integrating Linguistics and AI: Morphological Analysis and Corpus Development of Endangered Toto Language of West Bengal,” *Waiguo Yuyan yu Wenhua Journal*, vol. 9, no. 6, pp. 1149–1171, Sep. 2025, doi: 06.2249/Wyyw.28.09.2025.01. Also available as arXiv:2510.22629 [cs.CL]. (Q3, IF:0.03)
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Annexure II

Invited Lectures/talks

Delivered 68 invited sessions, including lectures, keynotes, workshops, webinars and panel discussions, across national and international platforms. Highlighted below are the 15 most significant engagements, selected for international reach, premier host institutions, and keynote or inaugural roles.

1. Invited as a Panel Expert on “Upskilling Faculty for AI-Enabled Classrooms and Labs” at the AI Leadership Summit (AILS) 2026 – Shaping Intelligent Futures, organized by NITTTR Kolkata, on 31st July 2026.
2. Delivered a session on “From Generalized Hype to Purpose-Built Intelligence” to the students of the Department of Computer Science, University of Huelva, Spain, on 6th May 2026.
3. Delivered a lecture on “LLMs to SLMs: Smarter, Smaller and Safer AI” at the International Symposium on Innovations in Computer Vision and Applications (ISICVA 2025), Techno International New Town, Kolkata, on 28th–29th November 2025.
4. Delivered a talk on “AI’s Role in Education and Future Learning” at the two-day workshop “AI Day for Teachers”, organized by the IDEAS Technology Innovation Hub at the Indian Statistical Institute, on 26th June 2025.
5. Delivered an invited lecture on “The Rise of LLMs: Disrupting Education and Redefining the Role of Programming” at Mizoram University under the Malaviya Mission Teacher Training Centre (MMTTC) scheme on 5th June 2025.
6. Conducted two hands-on training sessions on Virtual Laboratories and AR/VR-based content creation for educators from over 20 schools in Bhutan, under an academic collaboration between the Department of Education and Skill Development, Royal Government of Bhutan, and Adamas University (2025).
7. Delivered an invited speech on “Rethinking AI Scale: Harnessing Small Language Models for Sustainable, Localized Innovation” at the International Conference on Data-Driven Applications (ICDDA 2025).
8. Delivered an expert talk organized by the Department of Business Management at Christ University (Lavasa Campus) on “Empowering Innovation: Navigating the Patent Ecosystem” on 24th March 2025.
9. Delivered the inaugural address at ICSSCC 2025 (hosted by MIT-WPU) on “Democratizing Generative AI: Pathways to Open Innovation in Healthcare” on 21st March 2025.
10. Delivered an invited lecture to officers of Bharatiya Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL), Salboni, on “Printing Security Against IoT Cyber Threats” on 3rd February 2025, followed by the valedictory address on “Safety and Well-being: Crucial Pillar for Viksit Bharat” on 10th March 2025.
11. Delivered an invited lecture at the International Conference on Data Driven AI (ICDDA 2024) at Kaziranga University on “Moving Towards Open Generative AI in Healthcare”, followed by a panel discussion on the societal impact of generative AI alongside professors from IIT Kanpur, IIT Bombay, IIT Guwahati and Tezpur University, on 16th March 2024.
12. Participated as an international panelist at GatherVerse 2024 in the discussion “Innovating with Heart: Technology, Humanity, and the Compassionate Path” on 20th February 2024.
13. Delivered a talk as a distinguished speaker at the 6th Global Emerging Innovation Summit 2023 on “Transformative Technologies: Shaping the History and Destiny of Humanity” on 31st August 2023.
14. Delivered invited lectures on “Python Programming” in a joint international workshop organized by Quirino State University, Philippines, and Adamas University on 8th March 2023.
15. Delivered a keynote speech on “Experience the Future through Augmented Reality” at the 3rd International Conference on Contents, Computing & Communication (ICCCC-2022), organized by Matoshri College of Engineering and Research on 26th February 2022.