



Sangita Bose

Assistant Professor

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📅 17.11.1993 🇮🇳 Indian 🆔 Orchid ID: 0009-0008-8536-5012

🔍 Google Scholar ID: X6ePv3sAAAAJ 🔗 Vidwan ID: 512392

Summary

Dedicated and research-oriented academician with over **10 years** of experience in higher education, teaching, research, curriculum development, and academic administration in the field of Computer Science and Engineering. Currently serving as an **Assistant Professor and registered Ph.D.(Computer Science)** candidate of University of Calcutta(St. Xavier's College (Autonomous) - Kolkata). Possesses extensive teaching expertise across Artificial Intelligence, Machine Learning, Deep Learning, Data Science, Internet of Things, Algorithms, Database Management Systems, and Programming Languages.

An active researcher with significant contributions in Artificial Intelligence, Explainable AI, Deep Learning, Healthcare Analytics, and Predictive Modeling, evidenced by numerous international conference publications, book chapters, and patents. Demonstrated excellence in supervising student projects, organizing academic activities, contributing to curriculum development, and fostering industry-academia collaboration. Committed to advancing interdisciplinary research, developing innovative AI-driven solutions for real-world challenges, and creating an engaging, student-centric learning environment. Adept at integrating emerging technologies into teaching and research while maintaining a strong focus on academic excellence, professional ethics, and continuous learning.

Professional Experience

09/2023 – Present
Barrackpore, Kolkata,
West Bengal-700124

Swami Vivekananda University

Assistant Professor

Key Responsibilities and Achievements:

- Teach undergraduate and postgraduate students of BCA, B.Sc. (Hons.) in Advanced Networking and Cyber Security, B.Tech. in Computer Science and Engineering (CSE), B.Tech. in Data Science, and MCA programmes.
- Deliver **undergraduate (UG) and postgraduate (PG) courses in Computer Science and Engineering, including** Artificial Intelligence (AI), Machine Learning (ML), Deep Learning, Data Science, Python Programming, C Programming, C++ Programming, Java Programming, Data Structures, Design and Analysis of Algorithms (DAA), Database Management Systems (DBMS), Operating Systems, Computer Networks, Data Communication, Internet of Things (IoT), Software Engineering, Computer Organization and Architecture, Digital Logic, Compiler Design, Theory of Computation, Big Data Analytics, Data Mining and Data Warehousing, Business Intelligence, Natural Language Processing (NLP), Project Management, Mini Project Guidance, Major Project Guidance, Seminar Coordination and Evaluation, Internship Guidance, Laboratory Course Instruction, Project Supervision.
- Develop and update course curriculum, lecture materials, laboratory exercises, and assessment methodologies in accordance with university and accreditation requirements.
- Mentor and supervise undergraduate and postgraduate student projects, dissertations, and research activities.
- Conduct interdisciplinary research in Artificial Intelligence, Machine Learning, Explainable AI, Graph Neural Networks, and Generative AI, leading to publications, patents, and scholarly contributions.

- Guide students in project-based learning, innovation activities, hackathons, and technical competitions.
- Organize and coordinate workshops, seminars, faculty development programs, conferences, and industry-academia interaction initiatives.
- Participate in curriculum design, academic administration, outcome-based education (OBE) implementation, and quality assurance activities.
- Serve on various departmental and institutional committees, contributing to academic planning and policy development.
- Engage in continuous professional development through research collaborations, certifications, and emerging technology training.
- Foster a student-centric learning environment by integrating modern pedagogical approaches, e-learning platforms, and innovative teaching methodologies.
- Contribute to institutional research initiatives through publications in international conferences, book chapters, journal articles, and intellectual property generation.
- Served as **Departmental Coordinator** (July 2024 – May 2026), coordinating departmental academic activities, faculty assignments, student engagement initiatives, and administrative responsibilities.
- Served as **Examination Coordinator** (July 2024 – May 2026), overseeing examination planning, scheduling, invigilation, assessment coordination, result processing, and ensuring the smooth conduct of university examinations in compliance with institutional and university regulations.
- Served as **Training & Placement Coordinator**, coordinating training programmes, skill development initiatives, internship opportunities, campus recruitment activities, industry interactions, placement drives, career guidance sessions, and employer engagement to enhance students' employability and career prospects.
- Collaborate with faculty members, researchers, and industry experts to promote interdisciplinary research, knowledge exchange, and academic excellence.

02/2023 – 08/2023
Barasat, Kolkata,
West Bengal

National Institute of Electronics & Information Technology (NIELIT), Barasat Govt. college

Head of the Department

Served as a **Full-Time Lecturer & Head of the Department (HOD)** in the Department of Computer Science/Information Technology at the National Institute of Electronics & Information Technology (NIELIT), Barasat Government College, from **February 2023 to August 2023**. Delivered undergraduate-level lectures, designed course content, conducted laboratory sessions, prepared assessments, and mentored students in both theoretical and practical aspects of computing. Taught **Machine Learning** along with core Computer Science and IT subjects, including **Programming in C, Data Structures, Object-Oriented Programming using Java, Python Programming, Database Management Systems (DBMS), Operating Systems, Computer Networks, Software Engineering, Web Technologies (HTML, CSS, JavaScript), Internet & Web Programming, Artificial Intelligence, Computer Organization & Architecture, Digital Logic, Discrete Mathematics, Data Communication, Machine Learning, Deep Learning, IOT, Cyber Security Fundamentals, Cloud Computing, and Information Technology Fundamentals**. Additionally, supervised academic activities, coordinated departmental operations, managed faculty and student affairs, maintained academic records, and contributed to curriculum planning and quality assurance initiatives.

04/2022 – 08/2023
Newtown, Kolkata,
West Bengal

Sister Nivedita University

Visiting Faculty

Served as a **Visiting Faculty** in the Department of Computer Science, delivering undergraduate and postgraduate courses through lectures, practical laboratory sessions, student mentoring, and academic assessment. Taught a wide range of foundational and emerging Computer Science subjects, including **Programming in C, C++, Java, Python Programming, Data Structures and Algorithms, Database Management Systems (DBMS), Operating Systems, Computer Networks, Software Engineering, Business Analytics, Web Technologies, Internet of Things (IoT), Artificial Intelligence and Data Mining**. Contributed to curriculum delivery, laboratory supervision, project guidance, outcome-based education (OBE) practices, and the development of students' technical, analytical, and research skills.

09/2022 – 01/2023
Madhamgram,
Kolkata, West Bengal

Institute of Genetic Engineering (IGE)

Assistant Professor

- Delivered undergraduate courses in Computer Science, Information Technology, and allied disciplines.
- Taught subjects including Programming in C, Data Structures, Database Management Systems (DBMS), Operating Systems, Computer Networks, Software Engineering, Web Technologies, Python Programming, Artificial Intelligence, and Machine Learning.
- Prepared lesson plans, lecture materials, assignments, question papers, and conducted practical laboratory sessions.
- Mentored students in academic projects, seminars, and technical presentations.
- Evaluated student performance through continuous assessments, laboratory examinations, and end-semester examinations.
- Participated in curriculum development, departmental academic activities, and quality assurance initiatives.
- Contributed to research, academic administration, and student mentoring while promoting an outcome-based learning environment.

12/2015 – 08/2022
Barasat, Kolkata,
West Bengal

National Institute of Electronics & Information Technology (NIELIT), Barasat Govt. college

Full time Lecturer

- Delivered theory and practical laboratory courses for **O-Level, A-Level, and B-Level** programmes in **Computer Science** and **Information Technology** under the NIELIT curriculum.
- Taught core subjects including **Programming in C, C++, Java, Python, Data Structures, Database Management Systems (DBMS), Operating Systems, Computer Networks, Software Engineering, Web Technologies, Computer Organization & Architecture, Digital Electronics, Discrete Mathematics, Computer Fundamentals, IOT and Machine Learning**.
- Designed and delivered lectures, laboratory sessions, tutorials, assignments, quizzes, and examination papers in accordance with academic regulations.
- Developed and updated course content, laboratory manuals, and instructional materials to enhance teaching effectiveness and student engagement.
- Conducted practical laboratory sessions and guided students in programming, software development, networking, and database implementation.
- Mentored students in academic projects, mini-projects, seminars, and technical presentations.
- Evaluated student performance through continuous assessments, practical examinations, viva-voce, assignments, and end-semester examinations.
- Utilized modern teaching methodologies, digital learning platforms, and ICT-enabled instructional tools to improve learning outcomes.
- Organized and coordinated technical workshops, coding competitions, seminars, guest lectures, and student development programmes.
- Assisted in curriculum implementation, departmental academic planning, examination management, and institutional administrative activities.
- Participated in faculty development programmes (FDPs), technical training, and professional certification programmes to enhance academic and technical expertise.

- Contributed to research and scholarly activities through publications, conference participation, and academic collaborations.
- Fostered an interactive and student-centric learning environment while promoting analytical thinking, problem-solving, and practical application of computer science concepts.

05/2015 – 11/2015
Saltlake City, Kolkata,
West Bengal

**National Institute of Electronics & Information Technology (NIELIT),
Bidhannagar Govt. college**

Trainee Faculty

- Assisted in delivering theory and practical laboratory classes for **NIELIT O-Level, A-Level** programmes in Computer Science and Information Technology.
- Conducted practical sessions in programming languages, database management, office automation, web technologies, and computer fundamentals.
- Prepared lecture notes, laboratory manuals, assignments, tutorials, and instructional materials.
- Guided students during laboratory exercises, programming assignments, and project work.
- Evaluated assignments, practical records, quizzes, viva-voce, and laboratory examinations under faculty supervision.
- Assisted in developing question papers, practical assessments, and academic documentation.
- Provided academic mentoring and technical support to students during classroom and laboratory sessions.
- Assisted in organizing technical workshops, seminars, and student development programmes.
- Supported departmental academic administration, examination activities, and curriculum implementation.
- Participated in faculty training programmes and continuously enhanced teaching and technical competencies.

Education

01/2023 – Present Kolkata, West Bengal , India	Doctor of Philosophy (Ph.D.) in Computer Science University of Calcutta(St. Xavier's College (Autonomous) - Kolkata) Ph.D. Status: Expected Thesis Submission: May 2027 • Ph.D. Registration: Completed(2026) • Ph.D. Enrollment: Completed(2023) • Ph.D. Coursework: Completed(73% marks) Research Areas: • Evolutionary Computation • Graph Neural Networks • Explainable Artificial Intelligence (XAI) • Generative Artificial Intelligence • Machine Learning • Deep Learning • Federated Learning • Edge Intelligence • Large Language Models (LLMs)
06/2026	UGC-NET (June 2026)-Computer Science and Applications Percentile:89.53%
09/2015 – 07/2017 Kolkata, West Bengal,India	Master of Science (M.Sc.) in Computer Science University of Calcutta(Asutosh College) Completed Master of Science (M.Sc.) in Computer Science with 67% marks , securing First Class (2nd Position) . The programme provided a strong foundation in algorithms, data structures, database management systems, computer networks, operating systems, software engineering, artificial intelligence, and advanced computing concepts. Developed expertise in computational problem-solving, programming, data-driven methodologies, and research-oriented techniques for intelligent systems and emerging technologies. Developed expertise in computational problem-solving, programming, data-driven methodologies, and research-oriented techniques for intelligent systems and emerging technologies. The programme strengthened analytical, technical, and research competencies, providing a solid foundation for advanced research in Artificial Intelligence, Machine Learning, Deep Learning, Explainable AI, Data Science, and related interdisciplinary domains.
09/2011 – 07/2014 Kolkata, West Bengal, India	Bachelor of Science (B.Sc. Honours) in Computer Science University of Calcutta(Surendranath College) Completed Bachelor of Science (Honours) in Computer Science with 51% marks, acquiring a strong foundation in programming, data structures, algorithms, database management systems, operating systems, computer networks, software engineering, computer organization and architecture, discrete mathematics, and theoretical computer science. The programme strengthened analytical thinking, computational problem-solving, software development, and practical programming skills, providing a solid academic foundation for advanced studies and research in Artificial Intelligence, Machine Learning, Data Science, and Intelligent Computing.
07/2009 – 06/2011 Ashokenagar Adarsha Balika Vidyalaya, Ashoknagar, North 24 Parganas	Higher Secondary Examination (HS)(10+2) – Science West Bengal Council of Higher Secondary Education (WBCHSE) Completed the Higher Secondary Examination (Science Stream) with 58% marks, studying Physics, Chemistry, Mathematics, Computer Applications, English, and Bengali , establishing a strong foundation in scientific principles, analytical reasoning, and problem-solving skills.

05/1999 – 06/2009
Ashokenagar Adarsha
Balika Vidyalaya,
Ashoknagar, North 24
Parganas

Secondary Education (10th Standard)

West Bengal Board of Secondary Education
Completed **Secondary Education (10th Standard)** with **64%** marks, acquiring a strong foundation in Mathematics, Physical Science, Life Science, English, Bengali- Paper 1, Bengali- Paper 2, History, Geography, and general academic studies, which developed analytical thinking, problem-solving abilities, communication skills, and prepared the foundation for higher studies in the Science stream.

Skills

Programming Languages

C, C++, Java, Python, Object-Oriented Programming (OOPs)

Database Management

Relational Database Design, SQL, MySQL, Normalization, ER Model, Transaction Management, Indexing, Query Optimization

Computer Networks

TCP/IP, Routing, Switching, Network Security, OSI Model

Cloud Computing

Virtualization, Cloud Services, Distributed Systems

Federated Learning

Privacy-Preserving ML, Distributed AI, Edge Intelligence

Office Productivity

MS Word, Excel, PowerPoint, Google Workspace

Communication

Technical Writing, Public Speaking, Academic Presentation

Computational Intelligence

Fuzzy Logic, Genetic Algorithms, Swarm Intelligence

Artificial Intelligence

Machine Learning, Deep Learning, Neural Networks, Generative AI, Explainable AI

Data Structures & Algorithms

Arrays, Linked Lists, Trees, Graphs, Sorting, Searching, DAA

Cyber Security

Information Security, Cryptography, Ethical Hacking

Big Data Analytics

Hadoop, Spark, Data Mining, Data Warehousing

Large Language Models (LLM)

Prompt Engineering, RAG, Fine-tuning, LLM Applications

Web Technologies

HTML, CSS, JavaScript, PHP

Project Management

Academic Projects, Research Projects, Planning & Documentation

Data Visualization Tools

Tableau, Power BI, Matplotlib, Seaborn

Data Science

Data Analysis, Data Visualization, Predictive Analytics

Operating Systems

Process Management, Memory Management, Scheduling, Linux, Windows

Internet of Things (IoT)

IoT Architecture, Sensors, Embedded Systems, Smart Applications

Explainable AI (XAI)

SHAP, LIME, Model Interpretability, Trustworthy AI

Learning Management Systems

Google Classroom, Moodle, Microsoft Teams

Software Engineering

SDLC, UML, Agile Methodology, Software Testing

Natural Language Processing (NLP)

Text Processing, Sentiment Analysis, Transformers, Chatbots

AI Agents & Autonomous Systems

Multi-Agent Systems, Tool-Using AI, Autonomous Decision Systems

Languages

English

Completed **Intermediate Level Certification (April 2019 – May 2019)** from the **British Council**, gaining improved proficiency in English communication skills, including reading, writing, listening, and speaking. The programme enhanced vocabulary, grammar usage, comprehension ability, and professional communication skills, contributing to overall academic and professional development.

Hindi

Demonstrated proficiency in **Hindi language communication**, including reading, writing, and speaking skills. Capable of understanding and effectively communicating academic and professional content in Hindi, supporting multilingual teaching environments, student interaction, and administrative communication.

Bengali

Demonstrated proficiency in **Bengali language communication**, including reading, writing, and speaking skills. Able to effectively communicate academic and professional content in Bengali, facilitating student interaction, classroom teaching, and administrative coordination in regional language settings.

Certificates

Data Analytics with Python

Elite Certificate from IIT Roorkee under SWAYAM-NPTEL, covering Python-based data analysis, statistical computing, and data visualization techniques.

Problem Solving through Programming in C

Elite certification from IIT Kharagpur (NPTEL), covering C programming, algorithms, and structured problem-solving.

Introduction to Machine Learning

NPTEL certification from IIT Madras, focusing on supervised and unsupervised learning techniques.

Basic to Advanced SQL

Certification from Skill Nation covering database querying, SQL operations, joins, subqueries, and database management techniques.

Basic to Advanced Microsoft PowerPoint

Professional certification from Skill Nation in presentation design, visual communication, slide structuring, and effective academic/business presentations.

Artificial Intelligence: Concepts and Techniques

Elite + Silver certification from IISc Bangalore (NPTEL), focusing on AI fundamentals, intelligent systems, and core AI techniques.

Introduction to Programming in C

Elite certification from IIT Kharagpur (NPTEL), focusing on fundamentals of C programming and software development basics.

Intermediate Level (British Council)

English language proficiency certification improving reading, writing, listening, and speaking skills for academic and professional communication.

Basic to Advanced Tableau Dashboard

Training in data visualization, dashboard creation, interactive reporting, and business intelligence using Tableau.

IBM Cognos Analytics V11.1.x Reporting Essentials

IBM certification focusing on enterprise reporting, analytics, and business intelligence tools.

The Joy of Computing using Python

Elite + Silver certification from IIT Madras (NPTEL), emphasizing computational thinking, problem-solving, and Python programming.

Deep Learning

NPTEL certification from IIT Kharagpur, covering neural networks, backpropagation, and deep learning architectures.

Basic to Advanced Microsoft Excel

Professional certification from Skill Nation in Excel data handling, formulas, data analysis, and spreadsheet analytics for business and academic applications.

Business Intelligence using Power BI

Certification in Power BI covering data modeling, dashboard development, data visualization, and business intelligence reporting.

NASSCOM Python Certification

Certified by NASSCOM in Python programming, covering fundamentals of Python, data types, control structures, functions, object-oriented programming concepts, file handling, and basic data processing for real-world applications.

Interests

Reading Technology and Research Articles

Regularly explore scholarly journals, conference proceedings, and emerging technology publications to stay updated with advancements in Computer Science and Artificial Intelligence.

Online Professional Development

Actively participate in online courses, webinars, faculty development programmes (FDPs), and technical certification programmes to strengthen professional competencies.

Mentoring Students

Guide students in academic projects, research activities, career planning, technical competitions, and skill development initiatives.

Listening to Music

Appreciate music as a means of relaxation, creativity, and maintaining a balanced personal and professional lifestyle.

Coding and Problem Solving

Enjoy developing algorithms, implementing software solutions, and solving computational problems using modern programming languages and tools.

Technical Blogging

Create and share technical content, tutorials, and research insights to promote knowledge dissemination and continuous learning.

Organizing Technical Events

Coordinate workshops, seminars, faculty development programmes, conferences, hackathons, and other academic and technical events.

Traveling

Explore new places, cultures, and educational institutions to broaden perspectives and gain diverse learning experiences.

Learning Emerging Technologies

Continuously enhance knowledge in Artificial Intelligence, Machine Learning, Deep Learning, Generative AI, Edge Intelligence, and other cutting-edge technologies.

Public Speaking

Deliver academic presentations, seminars, workshops, and conference talks, fostering effective communication and knowledge sharing.

Chess

Enjoy playing chess to enhance strategic thinking, analytical reasoning, decision-making, and problem-solving abilities.

Photography

Pursue photography as a creative hobby, focusing on capturing landscapes, nature, and memorable moments while developing visual storytelling skills.

Projects

Title: Developing a Native Language Based Question-Answer Generative Model to Learn Digital Empowerment

The proposed research aims to develop a novel question-answer generative model that helps native language speaking students from different subject domains to spread the knowledge of digital empowerment. This project seeks to leverage advanced natural language processing (NLP) techniques, such as transformer and large language models, to enhance the accessibility of information for [Native Language]-speaking students. This research aims to develop a cutting-edge question-answer generative model. Leveraging advanced natural language processing (NLP) techniques, this project intends to bridge the language gap and enhance information accessibility for [Native Language]-speaking communities. Over three years, the study will involve the collection and creation of a comprehensive bilingual dataset, the development of our language translation model, the design and training of the generative model by augmenting Retrieval-Augmented Generation (RAG), and thorough evaluation and iterative refinement based on user feedback and performance metrics. The expected outcome is a highly accurate question-answer generative model deployed as a web-based application or API, significantly improving access to information and resources for [Native Language] speakers. This research promises to contribute to the field of NLP and facilitate better communication and understanding across languages.

Objectives:

- 1. Develop a Generative Question-Answer Model:** To design and build a state-of-the-art generative question-answer model leveraging advanced NLP techniques, such as transformer-based architectures, aimed at bridging the language gap and enhancing information accessibility for [Native Language]-speaking communities.

2. **Create a Bilingual Dataset:** To collect and construct an extensive bilingual dataset of question-answer pairs, ensuring the inclusion of diverse subject domains to facilitate comprehensive digital empowerment for [Native Language]-speaking students.
3. **Enhance Digital Empowerment:** To enhance digital literacy and empowerment among [Native Language]-speaking students by ensuring the generative model can accurately translate and generate contextually relevant and informative responses.
4. **Evaluate and Optimize the Model:** To rigorously assess the performance of the generative model using linguistic, contextual, and user-centric metrics, ensuring high accuracy and relevance in responses, and to iteratively refine the model based on comprehensive feedback and performance evaluations.
5. **Deploy and Monitor the Application:** To deploy the generative question-answer model as a web-based application or API, providing continuous monitoring and updates to maintain and improve access to information and resources for [Native Language] speakers.

Title: Nationwide uniform food consuming system

The **Nationwide Uniform Food Consuming System** is a smart digital platform designed to establish a standardized and transparent food distribution and consumption management system across the country. The project aims to address challenges such as food wastage, unequal food distribution, nutritional imbalance, and inefficient resource utilization by integrating centralized data management with modern information technology.

The proposed system enables users, government agencies, food suppliers, and authorized organizations to monitor food allocation, consumption patterns, inventory status, and nutritional requirements through a unified platform. It incorporates user authentication, food inventory management, beneficiary registration, real-time data tracking, reporting, and analytics to ensure equitable distribution of food resources. The system can also support policy implementation by generating consumption statistics, identifying regional food demand, reducing food wastage, and promoting food security. By leveraging database technologies, web-based applications, and data analytics, the proposed solution enhances efficiency, transparency, and accountability in nationwide food management while contributing to sustainable development and public welfare.

Objectives:

- To design and develop a centralized digital platform for nationwide food consumption and distribution management.
- To ensure equitable and transparent allocation of food resources among eligible beneficiaries.
- To maintain a centralized database for food inventory, distribution records, and consumption statistics.
- To minimize food wastage through efficient inventory monitoring and demand forecasting.
- To facilitate real-time monitoring and reporting of food availability and consumption patterns.
- To improve accountability and transparency in food distribution through secure user authentication and digital record management.
- To generate analytical reports that support government agencies and policymakers in making informed decisions.
- To promote food security by ensuring timely and efficient distribution of essential food items.
- To provide an easy-to-use web-based interface for administrators, suppliers, and beneficiaries.
- To demonstrate the application of database management systems and web technologies in solving real-world public distribution challenges.

Courses

01/2026 – 04/2026
NPTEL(ONLINE)

Data Analytics with Python

Indian Institute of Technology Roorkee (IIT Roorkee)

- Completed SWAYAM-NPTEL certification in Data Analytics with Python.
- Learned Python programming, data preprocessing, visualization, statistical analysis, NumPy, Pandas, and data analytics techniques.
- Achieved **Elite** certification with **64%** score

07/2025 – 10/2025
NPTEL(ONLINE)

Artificial Intelligence: Concepts and Techniques

Indian Institute of Science (IISc) Bangalore

- Completed SWAYAM-NPTEL certification in Artificial Intelligence.
- Studied intelligent agents, search algorithms, knowledge representation, reasoning, planning, and machine learning fundamentals.
- Awarded **Elite + Silver** certification with **76%** score.

07/2025 – 10/2025 NPTEL(ONLINE)	The Joy of Computing using Python Indian Institute of Technology Madras (IIT Madras) - Completed SWAYAM-NPTEL certification in Python programming. - Learned problem solving, computational thinking, algorithms, and Python programming concepts. - Earned Elite + Silver certification with 75% score.
07/2025 – 10/2025 NPTEL(ONLINE)	Problem Solving through Programming in C Indian Institute of Technology Kharagpur - Completed SWAYAM-NPTEL certification in C Programming. - Covered programming fundamentals, functions, arrays, pointers, structures, and algorithmic problem solving. - Achieved Elite certification with 60% score.
07/2025 – 09/2025 NPTEL(ONLINE)	Introduction to Programming in C Indian Institute of Technology Kharagpur - Completed introductory SWAYAM-NPTEL course on C programming. - Learned programming logic, operators, control structures, functions, arrays, pointers, and file handling. - Achieved Elite certification with 65% score.
01/2025 – 04/2025 NPTEL(ONLINE)	Deep Learning Indian Institute of Technology Kharagpur - Completed SWAYAM-NPTEL certification in Deep Learning. - Studied neural networks, CNNs, RNNs, optimization algorithms, and deep learning applications. - Successfully completed the course with 54% score.
01/2025 – 04/2025 NPTEL(ONLINE)	Introduction to Machine Learning Indian Institute of Technology Madras - Completed SWAYAM-NPTEL certification in Machine Learning. - Learned supervised and unsupervised learning, regression, classification, clustering, and model evaluation. - Successfully completed the course with 54% score.
06/2024 – 06/2024 Skill Nation(ONLINE)	Basic to Advanced Microsoft Excel Skill Nation - Completed professional certification in Microsoft Excel. - Gained expertise in formulas, Pivot Tables, charts, dashboards, data analysis, Power Query, and Excel automation.
04/2019 – 05/2019 KOLKATA,INDIA	Intermediate Level British Council - Completed Intermediate Level English language training. - Improved English communication, grammar, reading, writing, and listening skills.
06/2024 – 06/2024 Skill Nation(ONLINE)	Basic to Advanced SQL Skill Nation - Completed professional certification in SQL. - Learned database design, SQL queries, joins, subqueries, views, stored procedures, and database management.
07/2024 – 07/2024 Skill Nation(ONLINE)	Basic to Advanced Tableau Dashboard Skill Nation - Completed professional certification in Tableau. - Developed interactive dashboards, visual analytics, data storytelling, and business intelligence reporting.
07/2024 – 07/2024 Skill Nation(ONLINE)	Business Intelligence using Power BI Skill Nation Completed professional certification in Microsoft Power BI.

- Learned data modeling, DAX, Power Query, dashboard creation, and business intelligence reporting.

06/2024 – 06/2024
Skill Nation(ONLINE)

Basic to Advanced Microsoft PowerPoint

Skill Nation

- Completed professional certification in Microsoft PowerPoint.
- Learned presentation design, animations, templates, SmartArt, charts, and professional slide creation.

06/2024 – 06/2024
Kolkata,INDIA

IBM Cognos Analytics V11.1.x Reporting Essentials

IBM Skills Build

- Completed IBM professional certification in Cognos Analytics.
- Learned report creation, data visualization, dashboards, reporting tools, and business intelligence concepts.
- Successfully completed the IBM SkillsBuild program.

12/2024 – 01/2025
NASSCOM(ONLINE)

Python Certification

NASSCOM

- Completed professional certification in Python programming.
- Acquired practical knowledge of Python fundamentals, object-oriented programming, data structures, functions, file handling, exception handling, and modules.
- Developed skills in writing efficient, reusable, and scalable Python applications for software development and data analysis.
- Successfully fulfilled the certification requirements.

Organisations

04/2024 – 05/2026
KOLKATA, INDIA

SWAMI VIVEKANANDA UNIVERSITY

Departmental Coordinator

- Coordinated departmental academic, administrative, and student-related activities to ensure smooth operations.
- Planned and organized academic schedules, faculty meetings, workshops, seminars, and technical events.
- Facilitated communication between faculty members, students, and university administration.
- Monitored departmental documentation, reports, attendance, and accreditation-related records.
- Assisted in curriculum implementation, examination coordination, and quality assurance initiatives.
- Supported student mentoring, academic counseling, and extracurricular activities.
- Collaborated with various university committees to enhance departmental performance and academic excellence.
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04/2024 – 05/2026
KOLKATA,INDIA

SWAMI VIVEKANANDA UNIVERSITY

Departmental Training & Placement Coordinator

- Coordinated departmental training and placement activities for undergraduate and postgraduate students.
- Acted as the primary liaison between the department, the university Training & Placement Cell, and recruiting organizations.
- Organized campus recruitment drives, internship opportunities, aptitude training, mock interviews, and career development workshops.
- Guided students in resume writing, interview preparation, technical assessments, and professional communication.
- Collaborated with faculty members and industry professionals to enhance students' employability and industry readiness.
- Maintained placement records, student databases, and recruitment-related documentation.

- Assisted in building industry partnerships and promoting internship and placement opportunities for students.
- Contributed to improving placement outcomes through effective coordination, student mentoring, and employer engagement.

04/2024 – 05/2026
KOLKATA, INDIA

SWAMI VIVEKANANDA UNIVERSITY

Examination Coordinator

- Coordinated undergraduate and postgraduate examination activities across multiple academic programs.
- Planned and supervised examination schedules, seating arrangements, invigilation duties, and logistics.
- Ensured compliance with university examination regulations, policies, and quality standards.
- Managed confidential examination records, question papers, attendance sheets, and result-related documentation.
- Collaborated with academic departments, faculty members, and administrative staff to ensure the smooth conduct of examinations.
- Resolved examination-related issues and maintained the integrity, transparency, and confidentiality of the examination process.
- Assisted in the implementation of digital examination management and administrative workflows.
- Supported timely evaluation, result processing, and communication of examination-related information to students and faculty.

02/2023 – 08/2023
KOLKATA, INDIA

National Institute of Electronics & Information Technology (NIELIT), Barasat

Govt. college

HEAD OF THE DEPARTMENT(HOD)

- Led the Department of Computer Science & Information Technology, overseeing academic planning and departmental administration.
- Coordinated curriculum implementation, faculty workload, class schedules, and student academic activities.
- Delivered undergraduate courses in Computer Science, Information Technology, Machine Learning, Programming, Database Management Systems, Data Structures, Operating Systems, and related subjects.
- Monitored teaching quality, student performance, attendance, and continuous assessment processes.
- Organized departmental meetings, technical seminars, workshops, and skill development programs.
- Mentored students on academic projects, internships, career development, and higher education opportunities.
- Collaborated with faculty and institutional administration to ensure effective academic operations and compliance with university and NIELIT guidelines.
- Maintained departmental documentation, academic records, and examination-related responsibilities while promoting a student-centric learning environment.

Awards

08/04/2026

NPTEL BELIEVERS

SWAYAM-NPTEL

Recognized as an **NPTEL Believer** for consistently completing multiple SWAYAM-NPTEL certification courses with dedication and academic excellence. The recognition reflects a strong commitment to continuous learning, skill development, and professional growth across emerging areas of computer science, artificial intelligence, machine learning, data analytics, and programming.

NPTEL DISCIPLINE STARS

SWAYAM-NPTEL

Awarded the **NPTEL Discipline Star** recognition for successfully completing multiple SWAYAM-NPTEL certification courses with outstanding performance in the discipline of Computer Science and Engineering. This recognition demonstrates sustained academic excellence, subject expertise, and a strong commitment to continuous professional learning in areas such as Artificial Intelligence, Machine Learning, Deep Learning, Data Analytics, and Programming.

Publications(Journals)

- | | |
|---------|--|
| 05/2025 | <p>Language Models for Federated Continuous Learning for Privacy-Preserving Medical Diagnosis </p> <p>Journal of Emerging Trends in Computer Science and Applications (JETCSA)</p> <ul style="list-style-type: none"> Published a peer-reviewed research article proposing a privacy-preserving medical diagnosis framework integrating Large Language Models (LLMs) with federated continuous learning. Explored secure distributed learning techniques to improve diagnostic intelligence while preserving patient data privacy. DOI: https://doi.org/10.65525/jetcsa.v1i1.1  |
| 05/2025 | <p>Serverless Computing: Event-Driven Architectures for Agile Development </p> <p>Journal of Emerging Trends in Computer Science and Applications (JETCSA)</p> <ul style="list-style-type: none"> Published a peer-reviewed article examining serverless computing and event-driven architectures for scalable cloud application development. Discussed cloud-native design principles, Function-as-a-Service (FaaS), scalability, and agile software engineering practices. DOI: https://doi.org/10.65525/jetcsa.v1i1.2  |
| 05/2025 | <p>Random Forests: The Wisdom of Crowds in Action </p> <p>Journal of Emerging Trends in Computer Science and Applications (JETCSA)</p> <ul style="list-style-type: none"> Published a peer-reviewed article on Random Forest algorithms and ensemble learning techniques. Presented theoretical foundations, practical applications, performance evaluation, and advantages of Random Forest models across diverse machine learning tasks. DOI: https://doi.org/10.65525/jetcsa.v1i1.5  |
| 04/2021 | <p>An Analysis and Discussion of Human Sentiment Based on Social Network Information </p> <p>International Journal of HIT Transaction on ECCN</p> <ul style="list-style-type: none"> Published a peer-reviewed research article investigating sentiment analysis using social network data. Applied computational intelligence and natural language processing techniques to analyze user-generated content and extract meaningful sentiment patterns. DOI: https://doi.org/10.5281/zenodo.5892855  |

Publications(Conference proceedings)

- | | |
|---|--|
| 20/01/2026 –
22/01/2026
Swami Vivekananda
University | <p>Review Paper: Social Impact of Artificial Intelligence on Employment and Economy</p> <p>Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026</p> |
| 20/01/2026 –
22/01/2026
Swami Vivekananda
University | <p>Review Paper: Artificial Intelligence for Sustainable Development and Climate Change</p> <p>Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026</p> |

20/01/2026 – 22/01/01/2026 Swami Vivekananda University	AI in Cybersecurity: Threat Detection and Prevention Techniques Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026
20/01/2026 – 22/01/2026 Swami Vivekananda University	Review Paper: AI in Finance — Fraud Detection, Risk Analysis, and Algorithmic Trading Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026
20/01/2026 – 22/01/2026 Swami Vivekananda University	Artificial Intelligence in Smart Cities: Technologies and Applications Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026
20/01/2026 – 22/01/2026 Swami Vivekananda University	Artificial Intelligence in Education: Ethical and Pedagogical Implications Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026
20/01/2026 – 22/01/2026 Swami Vivekananda University	Review Paper: ChatGPT and Generative AI in Higher Education — Opportunities and Risks Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026
20/01/2026 – 22/01/2026 Swami Vivekananda University	Learning Analytics and AI: Trends and Applications — A Review Paper Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026
20/01/2026 – 22/01/2026 Swami Vivekananda University	Artificial Intelligence in Education: Personalized Learning and Intelligent Tutoring Systems Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026
20/01/2026 – 22/01/2026 Swami Vivekananda University	Artificial General Intelligence (AGI): Possibilities and Limitations – A Review Conference Name: 3rd International Conference on Integrative Science and Engineering (ICISE) – 2026
04/02/2025 – 06/02/2025 Swami Vivekananda University	Music Emotion Detection System Using AI/ML Conference Name: 3rd International Conference on Engineering Design and Computing (ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	AI-Driven Course Recommendation System Based on Student Performance Data Conference Name: 3rd International Conference on Engineering Design and Computing (ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	AI Powered Content Generation and Summarization Conference Name: 3rd International Conference on Engineering Design and Computing (ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	Powered Video Surveillance System for Anomaly Detection Conference Name: 3rd International Conference on Engineering Design and Computing (ICEDC-2025)

04/02/2025 – 06/02/2025 Swami Vivekananda University	Tourism Management System Using Machine Learning: A Modern Approach for Enhancing Travel Experiences Conference Name: 3rd International Conference on Engineering Design and Computing(ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	Music Emotion Detection System Using AI/ML Conference Name: 3rd International Conference on Engineering Design and Computing(ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	A Machine Learning Based Application for Health Risk Assessment and Personalized Preventive Recommendations Using Multi-Sourced Data Conference Name: 3rd International Conference on Engineering Design and Computing(ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	AI-Powered Personal Finance Assistant: Revolutionizing Financial Management through Intelligent Automation Conference Name: 3rd International Conference on Engineering Design and Computing(ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	Predictive Maintenance in IoT Systems Using Ensemble Learning Approaches Conference Name: 3rd International Conference on Engineering Design and Computing(ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	Smart Manufacturing Process Optimization Using Deep Reinforcement Learning Conference Name: 3rd International Conference on Engineering Design and Computing(ICEDC-2025)
04/02/2025 – 06/02/2025 Swami Vivekananda University	Integrating Clustering and Multivariate Models for Enhanced Infectious Disease Forecasting in India Conference Name: 3rd International Conference on Engineering Design and Computing(ICEDC-2025)
17/01/2025 – 19/01/2025 St. Xavier's College (Autonomous), Kolkata	Clustering-based Multivariate Prediction Model for Infectious Disease Forecasting in India  Conference Name: 9th International Conference on Data Management, Analytics & Innovation(ICDMAI-2025) Author: Sangita Bose, Romit S Beed
17/01/2025 – 19/01/2025 St. Xavier's College (Autonomous), Kolkata	A clustering-based prediction approach for new cases of COVID-19 in India  Conference Name: 9th International Conference on Data Management, Analytics & Innovation(ICDMAI-2025) Author: Sourav Malakar,Sangita Bose, Saptarsi Goswami
25/09/2024 – 26/09/2024 Swami Vivekananda University	Harnessing Artificial Intelligence for Sustainable Research and Development: A Pathway to Eco-Friendly Innovation Conference Name: 1st International Conference on Sustainable Research and Development(ICSRD – 2024)
25/09/2024 – 26/09/2024 Swami Vivekananda University	Green Innovation: Strategies for Implementing Sustainable Research and Development in Emerging Economies Conference Name: 1st International Conference on Sustainable Research and Development(ICSRD – 2024)
25/09/2024 – 26/09/2024 Swami Vivekananda University	Evaluating the Role of Sustainable R&D in Achieving Net-Zero Carbon Emissions by 2050 Conference Name: 1st International Conference on Sustainable Research and Development(ICSRD – 2024)

25/09/2024 – 26/09/2024 Swami Vivekananda University	The Intersection of Ethics and Sustainability in R&D: Navigating the Challenges of Responsible Innovation Conference Name: 1st International Conference on Sustainable Research and Development(ICSRD – 2024)
25/09/2024 – 26/09/2024 Swami Vivekananda University	Advancing Sustainable R&D in the Biotech Industry: Innovations, Challenges, and Future Directions Conference Name: 1st International Conference on Sustainable Research and Development(ICSRD – 2024)
20/06/2024 – 21/06/2024 Swami Vivekananda University	Dynamic Pricing Strategies in E-commerce: A Reinforcement Learning Approach for Real-time Adaptation Conference Name: International Conference on Integrative Science and Engineering (ICISE - 2024) Author: Sujoyita Chakraborty, Sayani Paul, Shreya Debnath, Prerana Chakraborty, Sangita Bose
20/06/2024 – 21/06/2024 Swami Vivekananda University	Explainable AI in Culinary Arts: Interpretable Models for Transparent Food Recommendations Conference Name: International Conference on Integrative Science and Engineering (ICISE - 2024) Author: Ankur Biswas, Soumyadip Mondal, Subhodeep Das, Jeet Chakraborty, Sibaji Bhattacharjee, Sangita Bose
20/06/2024 – 21/06/2024 Swami Vivekananda University	Ensemble Methods for Robust Food Recommendations: Aggregating Models for Improved Diversity and Accuracy Conference Name: International Conference on Integrative Science and Engineering (ICISE - 2024) Author: Sumit Marick, Sangita Bose
20/06/2024 – 21/06/2024 Swami Vivekananda University	Deep Style Embeddings for Fashion Recommendation: Bridging the Gap between Visual Aesthetics and User Preferences Conference Name: International Conference on Integrative Science and Engineering (ICISE - 2024) Author: Sougata Midya, Sangita Bose
20/06/2024 – 21/06/2024 Swami Vivekananda University	Neuroevolutionary Strategies: Combining Evolutionary Algorithms with Deep Learning for Model Design Conference Name: International Conference on Integrative Science and Engineering (ICISE - 2024) Author: Arkaprava Naskar, Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Cognitive Transfer Learning: Leveraging Human-Like Learning Strategies for Machine Intelligence Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Angel Mondal, Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Ephemeral Learning Machines: Adaptable Models for Rapidly Changing Data Environments Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Riya Mondal ,Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Meta-Reasoning Agents: Self-Aware Systems for Autonomous Decision-Making Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Moumita Mandal ,Sangita Bose

22/02/2024 – 24/02/2024 Swami Vivekananda University	Fashion Trend forecasting with machine learning:predicting consumer preferences for personalized recommendtion Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Aparajita Chatterjee, Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Graph Neural Networks for Culinary Pairing: Enhancing Flavor Harmony in Food Recommendations Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Sharna Saha, Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Eco aware Machine learning: Minimizing Environmental Footprints in Model training Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Nabbya kumari ,Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	QUANTUM-INSPIRED NEURAL NETWORKS: A HYBRID APPROACH TO ENHANCE COMPUTATIONAL EFFICIENCY Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Shrabani Pramanick,Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Neuromyotonic Fusion: Integrating Symbolic Reasoning with Deep Learning Architectures Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Pradipta Gorai, Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Dynamic Object Recognition in Visual Search: A Real Time Machine Learning Framework. Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024)
22/02/2024 – 24/02/2024 Swami Vivekananda University	Leaf Disease Detection using Machine Learning: A Review and Comparative Analysis Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Sourav Acharjya, Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Disease Prediction System using Machine Learning Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Sumit Marick,Sangita Bose
22/02/2024 – 24/02/2024 Swami Vivekananda University	Face recognition-grounded attendance monitoring system for educational institution Conference Name: 2nd International Conference on Engineering Design and Computing (ICEDC-2024) Author: Surabhi Ghosh,Sangita Bose
28/09/2023 – 30/09/2023 Swami Vivekananda University	Recent Advancement and Future Perspective of 6G Communication Conference Name: International Conference on Integrative Science and Engineering (ICISE 2023) Author: S. Bose, P. Nag, S. Maji, P. Roy Choudhury,S. Chatterjee
28/09/2023 – 30/09/2023 Swami Vivekananda University	A Smart Farming Production Approach Using Drones and IoT after pandemic situations Conference Name: International Conference on Integrative Science and Engineering (ICISE 2023)

Author: S. Bose, R. Beed

28/09/2023 –
30/09/2023
Swami Vivekananda
University

Study and Development of Online Recommendation System for Healthcare Support

Conference Name: International Conference on Integrative Science and Engineering (ICISE 2023)

Author: S. Bose, A. Dutta

28/09/2023 –
30/09/2023
Swami Vivekananda
University

Study and development of a Machine Learning-Based Intelligent Food Recommendation System

Conference Name: International Conference on Integrative Science and Engineering (ICISE 2023)

Author: S. Bose, J. Paul

28/09/2023 –
30/09/2023
Swami Vivekananda
University

Visualization of Figural Representation and Emotion Recognition Using Deep Learning

Conference Name: International Conference on Integrative Science and Engineering (ICISE 2023)

Author: A. Bose, R. Pal Das, S. Bose

07/01/2022 –
08/01/2022
Assam University,
Silchar

A Smart Farming Production Approach Using Drones and IoT after COVID -19 situations

Conference Name: Computational Intelligence in Communications and Business Analytics (CICBA-2022)

Author: Sangita Bose, Romit S Beed

Publications(Book chapter)

07/2026

Quantum and Neuromorphic Computing for Advanced Artificial Intelligence

ISBN Number: 978-81-688265-2-6

Publishers: Swami Vivekananda University (Institutional Publisher)

Author(s) Name: Sangita Bose

Role: Editor and Chapter Author

Chapter Title:

- Introduction to Quantum and Neuromorphic Computing
- Applications in Robotics, Healthcare, and Smart Systems
- Challenges, Security, and Ethical Issues in Next-Generation AI

07/2026

Explainable and Trustworthy AI: Methods, Frameworks, and Industrial Applications

ISBN Number: 978-81-688265-1-9

Publishers: Swami Vivekananda University (Institutional Publisher)

Author(s) Name: Sangita Bose

Role: Editor and Chapter Author

Chapter Title:

- Introduction to Explainable and Trustworthy Artificial Intelligence
- Industrial Applications of Explainable and Trustworthy AI in Healthcare, Finance, and Manufacturing
- Regulatory Standards, Policies, and Compliance for Trustworthy AI

07/2026

Multimodal and Embodied AI: Foundations for Next-Generation Intelligent Systems

ISBN Number: 978-81-688265-0-2

Publishers: Swami Vivekananda University (Institutional Publisher)

Author(s) Name: Sangita Bose

Role: Editor and Chapter Author

Chapter Title:

- Introduction to Multimodal and Embodied Artificial Intelligence
- Reinforcement Learning and Decision-Making in Embodied AI
- Ethical, Security, and Societal Challenges in Multimodal and Embodied AI

06/2026	Agentic AI and Autonomous Intelligent Systems: Theory, Design, and Applications ISBN Number: 978-81-974233-3-8 Publishers: Swami Vivekananda University (Institutional Publisher) Author(s) Name: Sangita Bose Role: Editor and Chapter Author Chapter Title: • Introduction to Agentic AI and Autonomous Intelligent Systems • Agentic AI in Industry 4.0, Smart Manufacturing, and IoT • Applications of Autonomous Intelligent Systems in Healthcare, Finance, and Education
01/2026	Scaling Intelligence: Engineering Robust LLMs for Systems & Software ISBN Number: 978-81-974233-9-0 Publishers: Swami Vivekananda University (Institutional Publisher) Author(s) Name: Sangita Bose Role: Editor and Chapter Author Chapter Title: • Foundations of Large Language Models and Generative AI(9-13) • Observability, Monitoring, and MLOps for LLM Systems(81-191) • Building Production-Grade Enterprise LLM Solutions(192-199)
12/2025	Intelligent Computing Architectures: Bridging AI, IoT, and Embedded Systems Sensor Networks and Data Acquisition for Intelligent Systems(Page No:20-29) ISBN Number: 978-81-974233-6-9 Publishers: Swami Vivekananda University (Institutional Publisher) Author(s) Name: Sangita Bose Role: Editor and Chapter Author
08/2025	Cyber Fortresses: Adaptive Cybersecurity in the Age of AI and Quantum Threats Human Factors and Social Engineering in the Age of AI (Page No: 158-161) ISBN Number:978-81-974233-7-6 Publishers: Swami Vivekananda University (Institutional Publisher) Author(s) Name: Sangita Bose Role: Editor and Chapter Author
07/2025	Cloud Chronicles:Navigating the New Era of Distributed Computing Artificial Intelligence and Machine Learning in the Cloud Ecosystem (Page No:235-238) ISBN Number:978-81-974233-8-3 Publishers: Swami Vivekananda University (Institutional Publisher) Author(s) Name: Sangita Bose Role: Editor and Chapter Author
07/2025	Ensemble Alchemy:Crafting Powerful Models with Diverse Techniques Scaling the Magic: Ensemble Learning in Big Data Environments(Page No:225-227) ISBN Number: 978-81-974233-1-4 Publishers: Swami Vivekananda University (Institutional Publisher) Author(s) Name: Sangita Bose Role: Editor and Chapter Author
07/2025	Unveiling Deep Learning: Innovations, Techniques, and Applications Exploring Explainable AI (XAI) in Deep Learning Models: Bridging Interpretability and Performance(Page No:154-162) ISBN Number: 978-81-974233-4-5 Publishers: Swami Vivekananda University (Institutional Publisher) Author(s) Name: Sangita Bose Role: Editor and Chapter Author
10/2024	Application of Machine Learning in Smart Education Technology ISBN Number: 978-81-974233-2-1 Publishers: Swami Vivekananda University (Institutional Publisher)

Author(s) Name: Sangita Bose
Role: Editor and Chapter Author

Chapter Title:

- Emotion Recognition and Adaptive Learning(Page No:37-40)
- Introduction to Smart Education Technology(Page No:9-12)

08/2024

The Evolution and Future of Generative AI-From Theory to Practice

Introduction to Generative AI: Foundations and Frameworks(Page No.9-11)

ISBN Number: 978-81-974233-5-2

Publishers: Swami Vivekananda University (Institutional Publisher)

Author(s) Name: Sangita Bose

Role: Editor and Chapter Author

05/2024

Applications of Internet of Things (IoT) in Smart Cities

ISBN Number: 978-81-974233-0-7

Publishers: Swami Vivekananda University (Institutional Publisher)

Author(s) Name: Sangita Bose

Role: Editor and Chapter Author

Chapter Title:

- Introduction to Smart Cities and IoT Integration(Page No:9-19)
- Future Directions and Emerging Trends in IoT for Smart Cities(Page No:221-227)

10/2023

Sustainable and Predictive Analytics Model

Introduction to the Advancements in Data Collection Technologies(Page No.229-246)

ISBN Number: 978-93-5967-752-1

Publishers: Swami Vivekananda University (Institutional Publisher)

Author(s) Name: Sangita Bose

Role: Editor and Chapter Author

07/2026

Applied Machine Learning: Concepts, Algorithms, and Real-World Applications

ISBN: 978-81-999633-5-1

ISBN 10 : 81-999633-5-2

Publishers: PENPRINTS PUBLICATION

Role: Editor and Chapter Author

Chapter Title:

- Dynamic Object Recognition in Visual Search: A Real Time Machine Learning Framework

Author(s) Name: Sougata Midya, Sangita Bose

Page No.: 6-16

- Leaf Disease Detection using Machine Learning: A Review and Comparative Analysis

Author(s) Name: Sourav Acharjya, Sangita Bose

Page No.: 17-21

- Disease Prediction System using Machine Learning

Author(s) Name: Sumit Marick, Sangita Bose

Page No.: 22-42

- Face recognition-grounded attendance monitoring system for educational institution

Author(s) Name: Surabhi Ghosh, Sangita Bose

Page No.: 43-50

04/2026

Computing for a Sustainable Future Bridging Innovation and Impact

ISBN: 978-81-995654-3-2

ISBN 10 : 81-995654-3-8

Publishers: PENPRINTS PUBLICATION

Role: Editor and Chapter Author

Chapter Title:

- Green Innovation: Strategies for Implementing Sustainable Research and Development in Emerging Economies

Author(s) Name: Sangita Bose

Page No.: 90-96

- The Intersection of Ethics and Sustainability in R&D: Navigating the Challenges of Responsible Innovation

Author(s) Name: Sangita Bose

Page No.: 97-101

- Advancing Sustainable R&D in the Biotech Industry: Innovations, Challenges, and Future Directions

Author(s) Name: Sangita Bose

Page No.: 102-106

01/2026

Foundations of Machine Learning and Intelligent Systems

ISBN: 978-81-995654-1-8

ISBN 10 : 81-995654-1-1

Publishers: PENPRINTS PUBLICATION

Role: Editor and Chapter Author

Chapter Title:

Ephemeral Learning Machines: Adaptable Models for Rapidly Changing Data Environments

Author(s) Name: Riya Mondal, Sangita Bose

Page No.: 105-116

Meta-Reasoning Agents: Self-Aware Systems for Autonomous Decision-Making

Author(s) Name: Moumita Mandal, Sangita Bose

Page No.: 117-126

Fashion Trend forecasting with machine learning: predicting consumer preferences for personalized recommendation

Author(s) Name: Aparajita Chatterjee, Sangita Bose

Page No.: 127-137

Eco aware Machine learning: Minimizing Environmental Footprints in Model training

Author(s) Name: Nabbya kumari, Sangita Bose

Page No.: 138-143

01/2026

Neural Horizons: The Uncharted Future of Deep Learning

ISBN: 978-81-997780-0-9

ISBN 10 : 81-997780-0-8

Publishers: PENPRINTS PUBLICATION

Role: Editor and Chapter Author

Chapter Title:

Cognitive Transfer Learning: Leveraging Human-Like Learning Strategies for Machine Intelligence

Author(s) Name: Angel Mondal, Sangita Bose

Page No.: 26-33

Graph Neural Networks for Culinary Pairing: Enhancing Flavor Harmony in Food Recommendations

Author(s) Name: Sharna Saha, Sangita Bose

Page No.: 34-43

Neuromyotonic Fusion: Integrating Symbolic Reasoning with Deep Learning Architectures

Author(s) Name: Pradipta Gorai, Sangita Bose

Page No.: 44-52

Smart Manufacturing Process Optimization Using Deep Reinforcement Learning

Author(s) Name: Sangita Bose

Page No.: 53-59

Integrating Clustering and Multivariate Models for Enhanced Infectious Disease Forecasting in India

Author(s) Name: Sangita Bose

Page No.: 60-65

Quantum-Inspired Neural Networks: A Hybrid Approach To Enhance Computational Efficiency

Author(s) Name: Shrabani Pramanick, Sangita Bose

Page No.: 235-252

12/2025

Cloud Nexus: Architecture, Innovation, and the Digital Horizon [↗](#)

ISBN: 978-81-999560-2-5

ISBN 10 : 81-999560-2-X

Publishers: PENPRINTS PUBLICATION

Role: Editor

Page No.: 1-183

12/2025

Beyond the Clouds: Reinventing the Future of Intelligent Computing [↗](#)

ISBN: 978-81-999560-8-7

ISBN 10 : 81-999560-8-9

Publishers: PENPRINTS PUBLICATION

Role: Editor

Page No.: 1-183

12/2025

Mind in the Machine: The Untold Story of AI Evolution [↗](#)

ISBN: 978-81-996515-1-7

ISBN 10 : 81-996515-1-2

Publishers: PENPRINTS PUBLICATION

Role: Editor and Chapter Author

Chapter Title:

Harnessing Artificial Intelligence for Sustainable Research and Development: A Pathway to Eco-Friendly Innovation

Author(s) Name: Sangita Bose

Page No.: 96-100

Powered Video Surveillance System for Anomaly Detection

Author(s) Name: Sangita Bose

Page No.: 101-106

Music Emotion Detection System Using AI/ML

Author(s) Name: Sangita Bose

Page No.: 107-112

AI-Powered Personal Finance Assistant: Revolutionizing Financial Management through Intelligent Automation

Author(s) Name: Sangita Bose

Page No.: 113-120

12/2025

The Connected Intelligence Unveiling the Future of IoT [↗](#)

ISBN: 978-81-995654-0-1

ISBN 10 : 81-995654-0-3

Publishers: PENPRINTS PUBLICATION

Role: Editor and Chapter Author

Chapter Title:

Predictive Maintenance in IoT Systems Using Ensemble Learning Approaches

Author(s) Name: Sangita Bose

Page No.: 196-202

12/2025

Digital Intelligence for Global Good [↗](#)

ISBN: 978-81-995654-6-3

ISBN 10 : 81-995654-6-2

Publishers: PENPRINTS PUBLICATION

Role: Editor

Page No.: 1-140

05/2025

Innovations Across Disciplines: Advancements in Engineering, Technology, and Sustainability [↗](#)

ISBN: 978-81-974427-5-9

Publishers: INSPIRA

Role: Chapter Author

Chapter Title:

AI-Driven Course Recommendation System Based on Student Performance Data

Author(s) Name: Sangita Bose

Page No.: 124-129

01/2025

Advanced Paradigms in Transdisciplinary Research [🔗](#)

ISBN: 978-93-49468-95-5

Publishers: MGM Publishing House

Role: Chapter Author

Chapter Title:

Evaluating the Role of Sustainable R&D in Achieving NetZero Carbon Emissions by 2050

Author(s) Name: Sangita Bose

Page No.: 176-179

07/2024

Fusion of Minds Multidisciplinary Research in Emerging Technologies [🔗](#)

ISBN: 978-93-6135-962-0

ISBN 10 : 81-996515-1-2

Publishers: AkiNik Publications

Role: Editor and Chapter Author

Chapter Title:

Dynamic Pricing Strategies in E-commerce: A Reinforcement Learning Approach for Real-time Adaptation

Author(s) Name: Sujoyita Chakraborty, Sayani Paul, Shreya Debnath, Prerana Chakraborty and Sangita Bose

Page No.: 249-254

Explainable AI in Culinary Arts: Interpretable Models for Transparent Food Recommendations

Author(s) Name: Ankur Biswas, Soumyadip Mondal, Subhodeep Das, Jeet Chakraborty, Sibaji Bhattacharjee and Sangita Bose

Page No.: 255-260

Ensemble Methods for Robust Food Recommendations: Aggregating Models for Improved Diversity and Accuracy

Author(s) Name: Sumit Marick and Sangita Bose

Page No.: 261-266

Deep Style Embeddings for Fashion Recommendation: Bridging the Gap between Visual Aesthetics and User Preferences

Author(s) Name: Sougata Midya and Sangita Bose

Page No.: 267-272

07/2025

Digital Design and Engineering in the Age of AI [🔗](#)

E-book ISBN: 978-93-6233-668-2

Paperback ISBN: 978-93-6233-130-4

Publishers: Bright Sky Publication

Role: Chapter Author

Chapter Title:

A Machine Learning Based Application for Health Risk Assessment and Personalized Preventive Recommendations using Multi-Sourced Data

Author(s) Name: Sangita Bose

Page No.: 115-123

07/2025

Machine Intelligence and Materials for Sustainable Development [🔗](#)

ISBN: 978-81-989217-3-4

Publishers: Ideal Publication

Role: Chapter Author

Chapter Title:

Tourism Management System Using Machine Learning: A Modern Approach for Enhancing Travel Experiences

Author(s) Name: Sangita Bose

Page No.: 170-180

07/2025

Technology Foresight and Transformation [🔗](#)

ISBN: 978-81-989217-7-2

Publishers: Ideal Publication
Role: Chapter Author
Chapter Title:
AI Powered Content Generation and Summarization
Author(s) Name: Sangita Bose
Page No.: 77-80

11/2025

Data Management, Analytics and Innovation 
Print ISBN: 978-981-96-6536-5
Online ISBN: 978-981-96-6537-2
Publishers: Springer, Singapore
Role: Chapter Author
Chapter Title:
Clustering-Based Multivariate Prediction Model for Infectious Disease Forecasting in India
Author(s) Name: Sangita Bose & Romit S. Beed
Page No.: 1- 12

11/2025

Data Management, Analytics and Innovation 
Print ISBN: 978-981-96-5859-6
Online ISBN: 978-981-96-5860-2
Publishers: Springer, Singapore
Role: Chapter Author
Chapter Title:
A Clustering-Based Prediction Approach for New Cases of COVID-19 in India
Author(s) Name: Sourav Malakar, Sangita Bose & Saptarsi Goswami
Page No.: 141–149

Publications(Patent/IPR granted)

24/11/2024 –
29/11/2024

Blockchain crowdfunding Platform
Name of the applicant: Swami Vivekananda University
Name of the inventor: Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya, Arka Provo Naskar, Sneha Mondal, Faizal Khan, Munmun Ghosh, Sambit Paul
Application No.: 202431091485

29/11/2024 –
6/12/2024

Youtube Clone Video Library
Name of the applicant: Swami Vivekananda University
Name of the inventor: Sumit Maric, Sangita Bose, Sourav Saha, Diganta Bhattacharyya
Application No.: 2431093720

29/11/2024 –
6/12/2024

Crime pattern analysis and rate prediction
Name of the applicant: Swami Vivekananda University
Name of the inventor: SUVAYU CHATTOPADHYAY, SNEHA DEBNATH, JEET BHATTACHARJEE, ARIJIT CHAKRABORTY, ARNAB NANDI, Prof. Somsubhra Gupta, Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya
Application No.: 202431093827

30/11/2024 –
6/12/2024

Data analysis using machine learning on geo location data
Name of the applicant: Swami Vivekananda University
Name of the inventor: Sukanya Dutta Gupta , Prof. Somsubhra Gupta, Sangita Bose , Sourav Saha , Diganta Bhattacharyya
Application No.: 202431094195

12/3/2024 –
13/12/2024

Face mask detection in real time
Name of the applicant: Swami Vivekananda University
Name of the inventor: Beauty Mondal, Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya

	Application No.: 202431095248 A Heart arrhythmia prediction using Artificial neural network Name of the applicant: Swami Vivekananda University Name of the inventor: Sangita Bose, Arpita Samanta, Sourav Saha, Diganta Bhattacharyya, Jayanta Chowdhury Application No.: 202431095820
12/4/2024 – 13/12/2024	Heart disease prediction from symptom analysis using machine learning Name of the applicant: Swami Vivekananda University Name of the inventor: Srija Biswas, Prof. Somsubhra Gupta, Sangita Bose, Sourav Saha, Diganta Bhattacharyya Application No.: 202431095834
12/5/2024 – 20/12/2024	Anti-fraud system for credit card transaction using machine learning & data science Name of the applicant: Swami Vivekananda University Name of the inventor: Rituparna Maity, Prof. Somsubhra Gupta, Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya Application No.: 202431096209
12/5/2024 – 20/12/2024	Precision in Estimation of Crop Yields using Machine Learning Name of the applicant: Swami Vivekananda University Name of the inventor: Sudipta Ghosh, Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya Application No.: 202431095882
12/5/2024 – 20/12/2024	Analyzing customer bank churn using ensemble learning models Name of the applicant: Swami Vivekananda University Name of the inventor: Sangita Bose, Sourav Saha, Jayanta Chowdhury, Diganta Bhattacharyya Application No.: 202431096223
12/5/2024 – 20/12/2024	Plant disease detection application Name of the applicant: Swami Vivekananda University Name of the inventor: Sourav Saha, Diganta Bhattacharyya, Subhankar Karmakar, Md. Arif Ahmad, Maroof Raza, Narayan Kumar Bhandari, Sabikun Nahar, Sangita Bose, Jayanta Chowdhury Application No.: 202431096218
24/11/2024 – 29/11/2024	An intelligent gender identification method based on facial images using compound modules Name of the applicant: Swami Vivekananda University Name of the inventor: Payal Bose, Sangita Bose, Sourav Saha Application No.: 202431091480
27/11/2024 – 6/12/2024	Brain Tumor Prediction using Machine Learning Name of the applicant: Swami Vivekananda University Name of the inventor: Sumana Chakraborty, Promita Maji, Sourav Saha, Sangita Bose, Jayanta Chowdhury Application No.: 202431092982
28/11/2024 – 6/12/2024	Cardiovascular Diseases Prediction using Multimodal Methodology in Deep Learning Name of the applicant: Swami Vivekananda University Name of the inventor: Sumana Chakraborty, Anupam Chowdhury, Sourav Saha, Sangita Bose, Jayanta Chowdhury Application No.: 202431093353
30/11/2024 – 6/12/2024	Motion Maze-where Gestures Lead to Gaming Adventures Name of the applicant: Swami Vivekananda University Name of the inventor: Jayanta Chowdhury, Prof. Somsubhra Gupta, Apurba Sarka, Goutam Mondal, Ananya Das, , Sourav Saha, Sangita Bose

Application No.: 202431094152

12/2/2024 –
13/12/2024

Parameter monitoring of incubator using IoT and Cloud

Name of the applicant: Swami Vivekananda University

Name of the inventor: Sanjay Nag, Debalina Ghosh, Sourav Saha, Sangita Bose, Jayanta Chowdhury

Application No.: 202431094855

12/5/2024 –
20/12/2024

Plant Leaf Disease Detection Using Deep Learning

Name of the applicant: Swami Vivekananda University

Name of the inventor: Sukriti Santra, Tanmoy Kumar, Bishoi, Sourav Saha, Sangita Bose, Jayanta Chowdhury

Application No.: 202431095911

21/05/2024 –
19/07/2024

Hybrid Compiler

Name of the applicant: Swami Vivekananda University

Name of the inventor: Souvik Gayan, Diprati Das, Prof. Somsubhra Gupta, Sangita Bose, Sumana Chakraborty, Subrata Nandi

Application No.: 202431039789

12/3/2024 –
13/12/2024

Virtual Trial Room

Name of the applicant: Swami Vivekananda University

Name of the inventor: Jayanta Chowdhury, Apurba Sarkar, Deep Ash, Suhita Sen, Rupsa Saha, Swastika Mitra, Tiyaasha Patra, Sourav Saha, Sangita Bose

Application No.: 202431095278

04/5/2026 –
16/05/2026

Multimedia Watermarking Device for Ownership Authentication

Name of the applicant: Swami Vivekananda University

Name of the inventor: Dr. Pabitra Pal, Mr. Arnab Das, Dr. Payal Bose, Mr. Khakon Das, Dr. Ranjan Kumar Mondal, Mr. Sourav Saha, Ms. Sangita Bose.

Date of Grant:15/05/2026

Design number: 6524290

Certificate(Symposium/Workshop/Conference/Seminar)

29/06/2026 – 3/7/2026
IEM Kolkata

Materials & Design: Strategies for Innovation and Sustainability

Event Type: Faculty Development Program (FDP)

Organizer: IEM Kolkata

Mode: Online

Role: Participant

15/6/26 – 20/6/26
St. Thomas' College of
Engineering &
Technology, Kolkata

From Data to Imagination: Deploying Generative AI across Disciplines

Event Type: Faculty Development Program (FDP)

Organizer: St. Thomas' College of Engineering & Technology, Kolkata, with Technical Co-sponsorship from IEEE Kolkata Section

Mode: Hybrid

Role: Participant

1/1/2026 – 1/04/2026

Data Analytics with Python

Organizer: NPTEL-AICTE Faculty Development Programme

Mode: Online

Role: Participant

01/07/2025 –
01/10/2025

Artificial Intelligence: Concepts and Techniques

Organizer: NPTEL-AICTE Faculty Development Programme

Mode: Online

Role: Participant

01/07/2025 –
01/10/2025

The Joy of Computing using Python

Organizer: NPTEL-AICTE Faculty Development Programme

	Mode: Online Role: Participant
01/07/2025 – 01/10/2025	Problem Solving through Programming in C Organizer: NPTEL-AICTE Faculty Development Programme Mode: Online Role: Participant
01/07/2025 – 01/09/2025	Introduction to Programming in C Organizer: NPTEL-AICTE Faculty Development Programme Mode: Online Role: Participant
01/01/2025 – 01/04/2025	Deep Learning Organizer: NPTEL-AICTE Faculty Development Programme Mode: Online Role: Participant
01/01/2025 – 01/04/2025	Introduction to Machine Learning Organizer: NPTEL-AICTE Faculty Development Programme Mode: Online Role: Participant
25/3/26 – 31/3/26	From Hand-crafted features to zero-shot Intelligence: An Evolution in Machine Learning Event Type: Faculty Development Program (FDP) Organizer: Department of CSE (IoTCSBT) & IT, IEM, Salt Lake, in association with HRDC, IEM-UEM Group and IEM IQAC Mode: Online Role: Participant
8/12/25 – 12/12/25	Empowering Leaders: Strategies for Influencing and Inspiring Teaching Fraternity through Digital Literacy Event Type: Faculty Development Program (FDP) Organizer: Department of Basic Science and Humanities (BSH), IEM Newtown in association with HRDC, IEM-UEM Group Mode: Online Role: Participant
17/6/25 – 21/6/25	Python for Data Science: Testing and Debugging Event Type: Faculty Development Program (FDP) Organizer: Department of Basic Science and Humanities, IEM Newtown, University of Engineering and Management, Kolkata in collaboration with HRDC Cell, IEM-UEM Group Mode: Hybrid Role: Participant
13/5/24 – 17/5/24	Quantum Computing : A New Paradigm of Science & Technology Event Type: Faculty Development Program (FDP) Organizer: Research and Development Cell, St. Thomas' College of Engineering & Technology, Kolkata with Technical Co-Sponsorship of IEEE Kolkata Section. Mode: Online Role: Participant
8/9/25 – 13/9/25	Quantum Edge Intelligence Event Type: Faculty Development Program (FDP) Organizer: AICTE TRAINING AND LEARNING (ATAL) ACADEMY, MCKV INSTITUTE OF ENGINEERING Mode: Online Role: Participant
12/7/22 – 16/7/22	Recent Trend and Research Application on IoT and Machine Learning Event Type: Faculty Development Program (FDP)

Organizer: Department of Information Technology in association with IQAC, Haldia Institute of Technology

Mode: Online

Role: Participant

4/8/25 – 8/8/25

Agents & Artifacts: Exploring the World of Gen AI and Agentic AI

Event Type: Faculty Development Program (FDP)

Organizer: Department of Information Technology, Institute of Engineering & Management (IEM), Kolkata, Salt Lake Campus, in association with HRDC, IEM-UEM Group and IEM IQAC

Mode: Online

Role: Participant

26/7/21 – 31/7/21

Deep Learning & Machine Learning Applications in Computer Vision

Event Type: Faculty Development Program (FDP)

Organizer: Department of Information Technology, GMRIT

Mode: Online

Role: Participant

23/6/25 – 27/6/25

Exploring AI Landscape in Multidisciplinary Contexts

Event Type: Faculty Development Program (FDP)

Organizer: St. Thomas' College of Engineering & Technology, Kolkata, India with Technical Co-Sponsorship of IEEE Kolkata Section

Mode: Online

Role: Participant

25/7/22 – 29/7/22

Cyber Security and Blockchain Technologies

Event Type: Faculty Development Program (FDP)

Organizer: Amity Institute of Information Technology, Amity University, Kolkata

Mode: Online

Role: Participant

16/8/21 – 21/8/21

Machine Learning – Foundation, Methodologies, and Interconnections

Event Type: Faculty Development Program (FDP)

Organizer: Amity Institute of Information Technology, Amity University, Kolkata

Mode: Online

Role: Participant

6/1/25 – 11/1/25

Building the Next Wave of Indian Startups with Advanced Computing Technologies

Event Type: Faculty Development Program (FDP)

Organizer: DEPT. OF CSE AND ECE, SUPREME KNOWLEDGE FOUNDATION (SKF) HOOGHLY, WEST BENGAL

Mode: Online

Role: Participant

11/7/22 – 15/7/22

Recent Trends in Artificial Intelligence & Machine Learning and Its Application

Event Type: Faculty Development Program (FDP)

Organizer: Department of Computer Science and Engineering, NSHM Institute of Engineering & Technology, NSHM Knowledge Campus Durgapur-GOI in Association with Computer Society of India, Kolkata Chapter & The Institution of Engineers (IEI), Durgapur Local Chapter

Mode: Online

Role: Participant

17/6/24 – 22/6/24

IBM Cognos Analytics V11.1.x Reporting Essentials

Event Type: Faculty Development Program (FDP)

Organizer: IBM(Swami Vivekananda University)

Mode: Offline

Role: Participant

27/2/23 – 3/3/23	Effective Research Methodology and Publication Strategies Event Type:: Workshop Organizer: All India Association for Christian Higher Education (AIACHE) in collaboration with Madras Christian College (MCC) Mode: Online Role: Participant
20/12/24 – 20/12/24	Editorial Insights for Successful Manuscript Writing from the Wiley's Desk Event Type: Workshop Organizer: Ph.D Cell and R&D Cell of St. Xavier's College(Autonomous) Kolkata Mode: Offline Role: Participant
25/2/23 – 25/2/23	Computer Training Programme for Group-C Office Staff Event Type: Workshop Organizer: Internal Quality Assurance Cell (IQAC), St. Xavier's College (Autonomous), Kolkata Mode: Offline Role: Technical resource person
13/3/23 – 15/3/23	Artificial Intelligence: A Tool for Modern Research Event Type: Workshop Organizer: St. Xavier's College (Autonomous) Mode: Offline Role: Participant
17/6/23 – 24/6/23	Decision making with advanced Excel Event Type: Workshop Organizer: Computer Society of India, Kolkata and St. Xavier's College (Autonomous), Kolkata - Postgraduate and Research Department of Computer Science Mode: Offline Role: Participant
1/7/20 – 1/7/20	Data Analytics to Fight COVID-19 Event Type: Webinar Organizer: IMPS College of Engineering & Technology Mode: Online Role: Participant
3/4/21 – 3/4/21	Career opportunities and Higher Education Options in Covid times and post Covid times Event Type: Webinar Organizer: IMS Business School in Association with A Technologies Mode: Online Role: Participant
11/6/21 – 12/6/21	Artificial Intelligence & Data Science Event Type: Webinar Organizer: Department of Software Development, B.Voc Studies & IQAC, Asutosh College. Mode: Online Role: Participant
9/7/20 – 9/7/20	Advanced Materials Synthesis, Characterization and Photovoltaic Application Event Type: Webinar Organizer: IMPS College of Engineering & Technology Mode: Online Role: Participant
27/6/20 – 27/6/20	The process of software development in modern technology Event Type: Webinar

Organizer: IMPS College of Engineering & Technology

Mode: Online

Role: Participant

9/2/21 – 9/2/21

Applications of Computational Statistics in Modern Era

Event Type: Webinar

Organizer: Department of Computer Centre, Vidyasagar University

Mode: Online

Role: Participant

13/7/20 – 13/7/20

Role of Data Science in Studying Covid-19 Pandemic

Event Type: Webinar

Organizer: Department of Computer Science in collaboration with IQAC, Bethune College

Mode: Online

Role: Participant

21/8/20 – 21/8/20

Understanding Deep Nets

Event Type: Webinar

Organizer: Department of Computer Science, Behala College

Mode: Online

Role: Participant

19/9/20 – 19/9/20

Future Generation Computing and Applications: Smart Devices

Event Type: Webinar

Organizer: School of Mobile Computing & Communication, Jadavpur University & Government College of Engineering & Ceramic Technology

Mode: Online

Role: Participant

9/9/21 – 9/9/21

NEP 2020 - The Future Roadmap for Higher Education

Event Type: Webinar

Organizer: Globsyn Business School in association with Confederation of Indian Industry (CII), Eastern Region

Mode: Online

Role: Participant

21/9/20 – 26/9/20

Artificial Intelligence and Machine Learning

Event Type: Webinar

Organizer: Department of Computer Science and Technology & Department of Electrical Engineering, Global Institute of Science and Technology, Haldia

Mode: Online

Role: Participant

7/10/20 – 7/10/20

Neural Networks and a Brief Insight into Deep Learning

Event Type: Webinar

Organizer: Department of Computer Science, Scottish Church College in collaboration with IQAC

Mode: Online

Role: Participant

7/6/21 – 7/6/21

Role of Ethics and Values in Human Life

Event Type: Webinar

Organizer: Department of Management, Synergy Institute of Engineering & Technology, Dhenkanal, Odisha

Mode: Online

Role: Participant

26/9/20 – 26/9/20

Future Generation Computing and Applications: Cloud Computing

Event Type: Webinar

Organizer: School of Mobile Computing & Communications, Jadavpur University & Government College of Engineering & Ceramic Technology

Mode: Online
Role: Participant

5/2/20 – 7/2/20

An Analysis and Discussion of Human Sentiment Based on Social Network Information

International Conference on Engineering Mathematics and Computing (ICEMC 2020)

Event Type: International Conference

Organizer: Haldia Institute of Technology

Mode: Offline

Role: Presenter

17/1/25 – 19/1/25

Clustering-based Multivariate Prediction Model for Infectious Disease Forecasting in India

9th International Conference on Data Management, Analytics & Innovation (ICDMAI 2025)

Event Type: International Conference

Organizer: St. Xavier's College (Autonomous), Kolkata

Mode: Offline

Role: Presenter

17/1/25 – 19/1/25

A Clustering-based Prediction Approach for New Cases of COVID-19 in India

9th International Conference on Data Management, Analytics & Innovation (ICDMAI 2025)

Event Type: International Conference

Organizer: St. Xavier's College (Autonomous), Kolkata

Mode: Offline

Role: Presenter

20/1/26 – 22/1/26

Review Paper: Social Impact of Artificial Intelligence on Employment and Economy

3rd International Conference on Integrative Science and Engineering (ICISE-2026)

Event Type: International Conference

Organizer: Swami Vivekananda University

Mode: Offline

Role: Presenter

4/2/25 – 6/2/25

AI-Driven Course Recommendation System Based on Student Performance Data

3rd International Conference on Engineering Design and Computing (ICEDC-2025)

Event Type: International Conference

Organizer: Swami Vivekananda University

Mode: Offline

Role: Presenter

25/9/24 – 26/9/24

Harnessing Artificial Intelligence for Sustainable Research and Development: A Pathway to Eco-Friendly Innovation

1st International Conference on Sustainable Research and Development (ICSRD-2024)

Event Type: International Conference

Organizer: Swami Vivekananda University

Mode: Offline

Role: Presenter

20/6/24 – 21/6/24

Ensemble Methods for Robust Food Recommendations: Aggregating Models for Improved Diversity and Accuracy

International Conference on Integrative Science and Engineering (ICISE-2024)

Event Type: International Conference

Organizer: Swami Vivekananda University

Mode: Offline

Role: Presenter

22/2/24 – 24/2/24

**QUANTUM-INSPIRED NEURAL NETWORKS: A HYBRID APPROACH TO
ENHANCE COMPUTATIONAL EFFICIENCY**

2nd International Conference on Engineering Design and Computing (ICEDC-2024)

Event Type: International Conference

Organizer: Swami Vivekananda University

Mode: Offline

Role: Presenter

28/9/23 – 30/9/23

Recent Advancement and Future Perspective of 6G Communication

International Conference on Integrative Science and Engineering (ICISE-2023)

Event Type: International Conference

Organizer: Swami Vivekananda University

Mode: Offline

Role: Presenter

Journal Reviewer

2023

GLOBAL HEALTHCON 2023: Challenges & Explications

Journal Name: Applied Biological Research

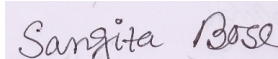
Publisher Name: Indian Journals

Review Role: Journal Reviewer

Reviewer Name: Sangita Bose

Declaration

I hereby declare that the information furnished in this Curriculum Vitae is true, complete, and accurate to the best of my knowledge and belief. I have over 10 years of professional experience in teaching, academic administration, research, and technical training, and the details presented herein accurately reflect my qualifications, experience, achievements, and professional credentials. I understand that any misrepresentation or omission of facts may lead to the withdrawal of my candidature or termination of employment.



SANGITA BOSE
KOLKATA, 14/07/2026

References

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