

Sreetam Ganguly

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Engineer and AI researcher with experience spanning artificial intelligence, computer vision, generative models, and scalable software systems. Author of multiple peer-reviewed publications and contributor to industry projects in healthcare, agriculture, and enterprise AI.

Research Areas: Machine Learning, Deep Learning, Computer Vision, Generative AI, Remote Sensing, Efficient AI Systems.

Teaching Interests: Artificial Intelligence, Machine Learning, Deep Learning, Computer Vision, Data Structures & Algorithms, Database Management Systems, Python Programming.

Education

- **M. E. in Computer Science & Engineering (Specialization: AI and Data Science) (2024 – 2026)**
Jadavpur University
- **B. Tech in Computer Science & Technology (2018 – 2022)**
Indian Institute of Engineering Science and Technology (IIST), Shibpur

Research Experience

- **Design of a Generative Adversarial Classifier to Address Class Imbalance in Cyclogenesis Prediction** (M. E. Thesis, Jadavpur University, July 2025 – August 2026)
- **A GPU-Aware Training Pipeline for Vector Labelled GANs under Constrained Datasets** (M. E. Mini Project, Jadavpur University, January 2025 – July 2025) (Manuscript submitted)
- **Deep Anomaly Detection and Classification Using Sub Complete Dual Artificial Neural Networks** (Sponsored Project, SystemOnSilicon Corporation, USA, Feb 2021 – May 2022)
- **Novel Fast Training High Accuracy Neural Network** (Sponsored Project, SystemOnSilicon Corporation, USA, January 2021 – July 2021)
- **Context Aware Risk Management System** (B.Tech. Project, IIST Shibpur, May 2021 – May 2022)

Selected Publications:

- R. Ray, Z. Agar, P. Dutta, **S. Ganguly**, P. Sah, and D. Roy, "MenGO: A Novel Cloud-Based Digital Healthcare Platform for Andrology Powered by Artificial Intelligence, Data Science & Analytics, Bioinformatics and Blockchain," Biomedical Scientific Instruments, vol. 57, no. 4, pp. 476–485, 2021.
- R. Sethi, D. K. Vishwakarma, **S. Ganguly**, and R. Ray, "A Comparative Study on Different Machine Learning Algorithms to Detect PCOS," Proceedings of the 14th International Conference on Computing, Communication and Networking Technologies (ICCCNT), 2023, pp. 1–7.
- D. Roy, **S. Ganguly**, S. Mondal, B. Chakraborty, S. Banerjee, Z. P. Agar, and R. Ray, "NutTix: An AI and Data Analytics-Powered Solution for Demand Prediction and Price Forecasting of Groundnut," Chemistry Proceedings, vol. 4, 2022.
- S. Mondal, D. Roy, **S. Ganguly**, R. Bhowmick, R. Sethi, S. Banerjee, and D. Sutar, "KrishiGrow: An Expert System Based Macro and Micronutrient Visualization System for Smart Crop Management," Journal of Agricultural Extension, vol. 22, no. 2, 2021.
- S. Mondal, Z. Agar, R. Ray, **S. Ganguly**, R. Bhowmick, and R. Sethi, "AgroNet: A Decentralized Platform for Collaborative Community-Driven Consultancy for Farmers and Agro Vendors," Journal of Agricultural Extension, vol. 22, no. 2, 2021.

Research Metrics (Google Scholar): Citations: 30; h-index: 2; i10-index: 2)

Technical Proficiencies

- **Programming Languages & Frameworks:** Python, TypeScript, Node.js, C, C++, TensorFlow, PyTorch, Keras, Loopback4
- **AI/ML:** Machine Learning, Deep Learning, Computer Vision, Generative AI
- **Data & Databases:** Pandas, SciKit Learn, MySQL, PostgreSQL, NoSQL
- **Cloud & DevOps:** AWS, Azure, Google Cloud, Oracle Cloud, Cloudflare
- **Tools:** Git, Apache2, Nginx

Professional Experience

- **Adyakshar Labs (Kolkata, India)** – Software Development Engineer (December 2023 – September 2024)
Developed scalable backend systems and AI-enabled applications for digital health, agriculture and financial technology. Designed cloud-native backend services using AWS, PostgreSQL and LoopBack4.
- **REBEL Foods Pvt. Ltd. (Mumbai, India)** – Data Analyst (July 2022 – December 2023)
Developed predictive analytics, sales forecasting and customer segmentation models. Performed statistical analysis and A/B testing for business optimization.
- **Selected Industrial Projects:** RiteFood (<https://ritefood.onehealthdigital.com/>), Tanaya (<https://play.google.com/store/apps/details?id=com.systemonsilicon.tanayahealth>)