

ROHAN SAHA

rohan.saha@zohomail.in

Website: rohansaha.in ♦ LinkedIn: rohansaha-in

EDUCATION

PhD: Doctor of Philosophy in Artificial Intelligence Indian Institute of technology, Kharagpur <i>Ongoing</i>	2026 - <i>Present</i>
M.Tech: Master of Technology in Artificial Intelligence and Machine Learning National Institute of Technical Teachers' Training and Research, Kolkata CGPA: 8.96	2024 - 2026
M.Sc: Master of Science in Computer Science University of Kalyani CGPA: 8.72	2021 - 2023
B.Sc: Bachelor of Science in Computer Science Kalyani Mahavidyalaya, University of Kalyani CGPA: 8.47	2018 - 2021

ACADEMIC ACHIEVEMENTS

Qualified GATE – Computer Science and Information Technology (CS)	2026
Qualified GATE – Data Science and Artificial Intelligence (DA)	2024

SKILLS AND INTERESTS

Research Interests: World Models, Energy Based Models, Optimizing DL Algorithms, Self-supervised Learning, Spiking and Neuromorphic Models, Transformer and LLMs

Previous Research Work on: Convolutional Neural Networks, AI in High energy Astrophysics, Optimize Clustering Algorithms

Programming Languages: Python, R, Jupyter Notebook(.ipynb), MATLAB, Java

PROJECTS

A Convolutional Neural Network-Based Approach for Classifying X-ray Binaries and AGNs using Spectral and temporal Properties
Aug 2025 - May 2026

Major Project (MTech)

- Built CNN models for galactic object and XRB classification.
- Analyzed physics properties of galactic objects.
- Applied transformer-based models to classify the physics properties of galactic objects.

Exploring Convex Geometry in Unsupervised Clustering
Feb 2025 - Jun 2025

Minor Project (MTech)

- Designed a geometry-inspired clustering approach.
- Proposed an improved linkage strategy for hierarchical clustering.
- Evaluated performance against standard clustering methods.

MyCamera: An Android Application for Real-time Image Processing
Jan 2023 - Jun 2023

Major Project (MSc)

- Developed an Android camera application using **Camera2API**.
- Implemented real-time image processing algorithms utilizing **OpenCV** library.

- Designed a user-friendly mobile interface for android user.

Delify: A Secure and Multifunctional Android Application

Dec 2020 - Jun 2021

Major Project (BSc)

- Integrated **Google Authentication** for secure, password-free user login.
- Utilized **Firebase Realtime Database** to enable synchronized for chats.
- Implemented **AES end-to-end encryption** for data security.

RESEARCH PUBLICATION

- **Journal**

1. **Rohan Saha**, Barun Kr Paul, Arnab Maitra, Chandan Chakraborty, Kinsuk Giri* ***“HCL/HAL: A Computational Geometry based Twin Approach for Improving Agglomerative Clustering”***, *International Journal of Data Science and Analytics*, Springer, DOI: 10.1007/s41060-026-01229-z. July, 2026

Résumé as of August 31, 2026