

RANJAN SARKAR

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PhD Research Scholar
Department of Artificial Intelligence
Indian Institute of Technology Kharagpur

[LinkedIn](#)
[Website](#)
[GitHub](#)

Research Interest

Reinforcement Learning, RLHF, Robotics and Automation, Agentic AI

Work Experience

2023 – 2024: Senior Business Analyst at EXL Service
Gurgaon, India

Education

2025 – Present: Indian Institute of Technology Kharagpur
PhD, Artificial Intelligence

2021 – 2023: Indian Institute of Technology Kharagpur
Master of Science (MSc), Mathematics
CGPA: 8.76/10

2018 – 2021: Ramakrishna Mission Vidyamandira (University of Calcutta)
Bachelor of Science (BSc), Mathematics
CGPA: 9.15/10

2018: Raiganj Coronation High School (HS)
12th Standard, Science Stream
Percentage: 88.6%

2016: Raiganj Coronation High School (HS)
10th Standard
Percentage: 94.57%

Projects

Master's Thesis: Image Compression (2022-2023)

Supervisor: Prof. Swanand Khare, Department of Mathematics, IIT Kharagpur

- Tensor CP decomposition is implemented in a python notebook.
- The **Alternative Least Square (ALS)** Optimization Method has been applied to get the low rank approximation of the image tensor.

Courses & Skills

- Linear Algebra
- Probability & Statistics
- Machine Learning
- Deep Learning
- Artificial Intelligence
- C Programming, Python
- Numerical Methods
- DBMS, SQL
- AI for Cyber Physical Systems
- Non-linear Programming

Awards & Achievements

1. Cleared the Joint CSIR-UGC NET (June 2024) with Lectureship.
2. INSPIRE Scholarship Holder (2018-2023) by DST (Dept. of Science and Technology), Govt. of India.