Mitanshu Sukhwani

mitanshu.sukhwani@gmail.com LinkedIn | GitHub | Credly +91 90991-99975

EXPERIENCE

Project Associate

Department of Computational and Data Sciences, Indian Institute of Science (IISc)

Bangalore, IN
Feb 2025- Present

Project Associate

Tirupati, IN

Department of Physics, Indian Institute of Science Education and Reasearch (IISER)

Feb 2023- Feb 2024

EDUCATION

Indian Institute of Technology (IIT) Madras

M.Sc. in Physics, CGPA: 7.53/10.00

Gujarat University

Ahmedabad, IN

B.Sc. in Physics, CGPA: 7.30/10.00 2017–2020

Research Projects

Fine-Tuning IBM Granite Models for Scientific Machine Learning

Project Associate | Supervisor: Prof. Sashikumaar Ganesan

IISc Bangalore Feb 2025 - Present

Chennai, IN

2020 - 2022

Improved domain-specific performance and adaptability for scientific applications.

PaperMatch: Advanced Scientific Article Recommendation System

Independent Project

Feb 2024 - Feb 2025

Developed an AI-driven recommendation system for scientific articles on arXiv, using embedding models, Gradio, and Milvus for efficient vector database management. Conference Proceedings & Website.

BrainConnectML: EEG to Graph-Based Machine Learning

IISER Tirupati

Project Associate | Supervisor: Dr. Aradhana Singh

Feb 2023 - Feb 2024

Created a complete pipeline that transforms EEG data into functional brain networks, extracts graph features, and applies machine learning for classification tasks through various methods at each step.

Brain Network Dynamics using Coupled Kuramoto Oscillators

IISER Tirupati

Project Associate | Supervisor: Dr. Aradhana Singh

Feb 2023 - Feb 2024

Investigated brain network synchronization using a modified Kuramoto Model on various network structures. Analyzed the impact of network topology on synchronization and chaotic dynamics.

SKILLS ACHIEVEMENTS & CERTIFICATIONS

- **Programming Languages:** Python, C++, SQL.
- ML Frameworks: Pytorch, TensorFlow, scikit-learn.
- Data Analysis Tools: MATLAB, MNE, NetworkX, NumPy, pandas, matplotlib, Numba, git, HPC, GPU.
- Cloud Computing: AWS, GCP, Azure, Oracle.
- Languages: English (Proficient), Hindi (Native).
- Achieved a percentile score of 98 in GATE
 Data Science and Artificial Intelligence.
- Achieved a percentile score of 95.5 in GATE
 Computer Science and IT.
- Achieved a percentile score of 95 in GATE
 Data Science and Artificial Intelligence.
- Achieved a percentile score of **95** in **GATE Physics**, conducted nationwide in India. 2023