

# GAURAV BHARDWAJ

Jamshedpur, Jharkhand, India

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## Work Experience

### Outlier

Aug 2024 – Oct 2024

AI Engineer

Remote - San Francisco

- Developed detailed annotations for over 500 data points used in training AI models over structured and unstructured data, reduced output inaccuracies by 30%.
- Streamlined the AI-generated content review process using reinforcement learning with human feedback, improving clarity and consistency in responses across automated interactions.
- Collaborated with other teams to ensure model outcomes aligned with business requirements, contributing data insights for the business team.

## Education

### INDIAN INSTITUTE OF TECHNOLOGY, DHANBAD

Dec 2021 - May 2025

Bachelor of Technology (B. Tech) in Electrical Engineering

Dhanbad, India

### RAJENDRA VIDYALAYA, JAMSHEDPUR

Class-12 ISC

2019-2021

Class-10 ICSE

2017-2019

## Paper

- De-hazing Methods for Bronchoscopy Images. ([Link](#))

## Projects

Unslope | Github | Flask, API(OpenAI, Claude), Python, HTML, CSS

- Unslope automates personalized cold email outreach by handling research, drafting, and delivery in just four steps—perfect for job seekers juggling busy schedules.
- Powered by Selenium, Flask, Claude/OpenAI agents, and Perplexity, it streamlines the entire cold-email workflow without any agentic frameworks.


Macrobean | Github | C, lua, SQLite

- A secure, portable, local, single-file web server. Zero dependencies, zero installation.
- It can serve static files, execute dynamic Lua scripts, query SQLite databases, and handle TLS (https) traffic without requiring any external runtimes, libraries, or configuration files.
- Full documentation is available at [macrobean](#).

STEM-solver | pytorch, objective-C, Metal

- Fine-tuned OpenELM-3B base model for STEM/math tasks, achieving **2.36x** higher inference speed than similar sized models with **2x** fewer memory footprint.
- Verified pass@1 on SCI-Q(93.75), MMLU(28.44), Hellaswag(75.28) benchmarks.
- Enhanced performance through fine-tuning using PEFT/LoRA, synthetic data and DPO with efficient **Metal** kernels.

## Achievements

- \* Ranked **14th out of 5000+** participants data science competition by IITG, achieving significant performance improvements in an Faster-RCNN, trained on 1,800+ HD images to detect automobile injuries (68%). **Project Link**
- \* Analyzed 10K data samples addressing loan defaults in quant research program at **JPMorgan Chase**; crafted effective strategies for risk prediction by enhancing existing models. 
- \* **Global rank 1740** in Google Kickstart Round H 2022.
- \* **Global rank 142** in CodeChef Starters 66.
- \* **All India rank 5963** in JEE Advanced 2021.

## Courses and Certifications

Generative AI with Large Language Models, Anthropic MCP AI-Agents, Advanced agents with Crew AI, Applied Prompt Engineering, Deep Learning Essentials with Keras, Data Visualization with Python, Financial Mathematics (MIT OCW), Probability and Statistics

## Technical Skills

**Languages:** Python, C, C++, Obj-C, Zig, lua

**Frameworks & Libraries:** AWS, GCP, Pytorch, LangChain, Crew, Terraform, Tableau, GIT, Github, Sagemaker AI

**Others:** Docker, Airflow, RAG, MCP, Websockets, bash, Prompt Engineering