

Atharv Jairath

+91-9650467164 | atharv.jairath@gmail.com | [LinkedIn](#) | [Portfolio](#) | [GitHub](#)

EDUCATION

Georgia Institute of Technology

Masters in Science, Computer Science

Atlanta, GA

Aug. 2024 – Aug. 2026

Guru Gobind Singh Indraprastha University | ADGITM

Bachelor of Technology, Computer Science — 9.093 CGPA

New Delhi, India

Aug. 2019 – Jul 2023

EXPERIENCE

Founding Machine Learning Engineer

Firi

Jan 2025 - Present

Bangalore, India

- Built LLM-based review analysis pipeline (GPT-4o) processing 11M reviews to extract insights and sentiment for product pages
- Built **multi-agent** product recommendation system using Elasticsearch, semantic search and Cohere rerank.
- Trained a **ModernBERT**-based query parser mapping user queries to Elasticsearch parameters, achieving 97% micro-precision.

Machine Learning Engineer

Entrupy

Aug 2023 - Jan 2025

Bangalore, India

- Successfully optimized model pipeline for 2X faster inference.
- Building a multi-region shoe segmentation model with HRnet backbone and custom decoder.
- Trained ensemble of **EfficientNet** + attention networks with final voting, achieving 91% TPR at 5% FPR for Nike fake/real classification.

Applied Scientist Intern

Amazon

Feb 2023 - July 2023

Bangalore, India

- Identified key features correlated with long-term user behavior among new-to-Amazon customers and developed predictive models to forecast settlement probabilities.
- Implemented reinforcement learning to optimize incentive allocation within budget, increasing customer settlement rates; research was **published** and presented at the **Amazon Machine Learning Conference (AMLC)**.

Machine Learning Intern

ExaWizards Inc.

Jan 2023 - April 2023

Hyderabad, India

- Created synthetic data using **Blended-latent Diffusion** to generate anomalies for improved accuracy of anomaly detection models.
- Investigated pose estimation on thermal images and the SAM for improved object segmentation.

Deep Learning Intern

HyperVerge

Jul 2022 - Dec 2022

Bengaluru, India

- Designed and executed a 1:N image classification system utilizing **DBNet** as the feature extractor for identity document verification across multiple geographic regions.
- Successfully **optimized** image classification pipeline resulting in a **147%** reduction in latency and a **103%** decrease in GPU requirements.

Computer Vision Intern

Spyne

Nov 2021 - May 2022

Gurgaon, India

- Researched and worked on problems like Image Segmentation, Watermark Removal and Image Classification for Zomato and Swiggy.
- Implemented end-to-end deep learning models like **U-Net**, **WNet** and **CLIP**, developed APIs and deployed them on **Nvidia Triton**.

NLP Research Intern

Oct. 2021 – Jan. 2022

Voiceshop

New Delhi, India

- Implemented concepts from state-of-the-art research papers related to Open-Domain Conversation.
- Deployed and finetuned **GPT-J-6B** on Amazon SageMaker utilizing Huggingface (DLCs).

Research Intern

Jul. 2021 – Aug. 2021

Dr. Akhilesh Das Gupta Institute of Technology

New Delhi, India

- Implemented a custom cost function for an ensemble model, reducing RMSE by **18%** as part of the research project “**A Data-driven Diabetes Predictive Model Using Novel Optimized Weighted Ensemble**”.

RESEARCHWORK AND PROJECTS

Grammatical Error Correction Model with Dynamic Context Learning | *Paper accepted at BDA 2023*

- Used **BERT** model to learn optimal splits within the paragraph/document ensuring maximal contextual information is preserved in the resulting chunks.
- Achieved improvements of **77%**, **19.61%**, and **10.49%** F_{0.5} score on CoNLL-2014, BEA-Dev, and FCE-Test datasets respectively over previous SOTA models.

AI Image Caption Generator | *Keras, CNN, LSTM, GloVe, Transfer learning*

- Developed an Encoder-Decoder model using **CNN** and **LSTM** to generate captions from an image.
- Encoded Images using **InceptionV3** model and words using GloVe.

POSITIONS OF RESPONSIBILITY

Machine Learning Lead, Google Developer Student Clubs: Organized workshops on Machine Learning, Supervised and Mentored team of 20+ members.

Founder, Younged: Founded an Ed-Tech platform to teach young aspirants Programming, Designed an efficient and beginner-friendly curriculum and Supervised Teachers.

Technical Lead, TutorateIndia: Managing technical execution to ensure adherence to budget, schedule, and scope. Designed, built, and maintaining a fully Functional LMS Website for the Startup.

TECHNICAL SKILLS

Languages: Python, C/C++ **ML:** PyTorch, TensorFlow, Scikit-learn **Data:** Pandas, NumPy, Matplotlib, Seaborn **Search/LLMs:** Elasticsearch, Semantic Search, RAG, LangGraph **Tools:** Git, AWS, GCP, Jupyter Notebook

MAJOR ACHIEVEMENTS

- Hackathon Wins: **Runnable X Together 2026** (\$1,000 prize, \$1M funding opportunity), **VibeHack 2025** (1st among 120 teams), **Metadome Emerging Tech Hackathon 2024**.
- Won **Smart India Hackathon 2022** held at **IIT Guwahati**.
- Among the **top 3** students from **ADGITM** selected for **Amazon ML Summer School 2022**.
- Placed **1st** among **300+** participants in MLH's Neighborhood Hacks.
- Secured **1st** among **600+** participants in Coders vs COVID Hackathon.
- **Winner, HackISOLATION** (IOSD) and **2nd runner-up, Inerve Hackathon** (IGDTUW).