

MOHAMMED AFAAN ANSARI

+1 (240) 413-1682 | mansari1@umd.edu | linkedin.com/in/afaan001 | github.com/affan00733

Education

University of Maryland College Park, *Master of Science in Computer Science (CMSC)* **Aug 2024 - Aug 2026**
Research Assistant under advisor professor Dr. Tianyi Zhou

Sardar Patel Institute of Technology, *Bachelor of Technology in Computer Engineering* **Jul 2019 - Jun 2022**
Academics: CGPA: 8.90/10.00

Research: Enhancing blood supply chain integrity (Springer SIST), strategies for identifying deception in digital media (Springer CCIS), forecasting twitter event trends using hashtag (ACM-ASONAM)

Projects: Interactive knowledge exchange on YouTube (Rank 1 - University's annual hackathon), Anomaly detection in pharmaceutical supply chains (Won DJCE annual hackathon)

Experience

University of Maryland College Park **Aug 2024 – Present**
Research Assistant - (Skills: Python, LLMs, NLP, Open-CV, HuggingFace, AI research collaboration) *Maryland, USA*

- Collaborated with Dr. Tianyi Zhou on AI Multimodal Large Language Models (MLLM), on academic chat generations.

Morgan Stanley Capital International (MSCI) **Jul 2022 – Aug 2024**
Data Science Technology Associate - (Skills: Python, GCP, Azure, DevOps, CI/CD Pipeline, Gemini) *Mumbai, India*

- Developed extraction pipeline with GCP's AI models to extract data from client's financial reports, enabling us to setup MSCI's first hybrid cloud system. Setup additional flow to rectify incorrectly classified data
- Individually achieved 90+% of extraction from financial records better than existing manual approach which was 60% and analyzed insights to resource's allocation, datasets and models deployment and overcame data variation problems
- Devised prompt engineering on Turnover/Revenue use-cases to replace model training making the process cost effective i.e. \$10 for model training & prediction for 1,000 items versus \$0.002 with the new approach
- Promotion to 'Associate' in a year as compared to typical 3-4 year cycle. Top rated analyst and won 'Star performer 2023' award amongst 1,200+ employees across various levels

Georgia Institute of Technology **Dec 2022 – Dec 2023**
Research Assistant - (Skills: Python, TensorFlow, Keras, PyTorch, OpenAI GPT-3.5/4o, Hugging Face) *Atlanta, USA*

- Created model for brain tumor detector using MRI images to achieve 85% accuracy on the 1000 patients participating; Expected to be part of Mayo Clinic's standard clinical practice in US
- Implemented Open AI-LLM & object-detection framework in EVADB which provides a low-code for Machine learning models by inputting simple queries and developed an efficient tool better than its competitors; langchain & pandasAI
- Designed a query for text-based documents to use ML models, & added extraction to the EVADB's hugging face pipeline

Rochester Institute of Technology **Jul 2022 – Jun 2023**
Research Assistant - (Skills: Python, NLP, Feature Engineering, Web Scrapping, EDA, ETL) *New York, USA*

- Examined 50+ publicly available tweets datasets for lifespan analysis of unpleasant tweets using NLP
- Researched data loss patterns in datasets with respect to symmetric & asymmetric losses using custom BERT model embeddings and XGBoost. Data capturing was banned post-takeover, adding relevance to this research
- Awarded as runner-up for 'best paper' at International Conference on Advances in Social Networks Analysis 2023

Sourceable (Columbia University backed startup) **Jan 2022 – July 2024**
Lead Software Developer - (Skills: Dailogflow, JS, React-Native, Docker, ReactJS, Kubernetes, SQL) *New York, USA*

- Developed website for real time location mapping to monitor crisis-hits. Used by 1500+ journalists in 52+ countries
- Lead development of technology platforms (website,apps) assisting projects in Syria & Turkey prevent data losses in 2022

Nomura Holdings **Jan 2022 – Jun 2022**
Internship – Global Market Information Technology - (Skills: Java, ReactJS, Django, Database, Rest-API) *Mumbai, India*

- Devised custom rules by using ELK stack (elastic search, Logstash, and Kibana) for ongoing traded data irregularities.
- Modeled AI smart mirror for personalized messages in financial instruments and daily market updates. It has been deployed in Nomura's India offices. Offered full-time offer with 40% pay rise compared to incoming analyst batch

Extracurriculars

- Additional Accolades:** Hackathon winner at Nomura Kakushin 2022, FSAI, MIT Pune code break, Hack Chennai 2022, Devfolio Hackon, TSEC, DA-IICT & KJSCE's annual competitions and Semi-finalist at IIT Bombay Eureka (Asia' largest business competition) and finalist at Smart India Hackathon 2022
- Interests:** Counselling 40+ students on their research and conducted 3+ faculty development programs at university. Organized 6+ beach cleaning, blood donations with 600+ participants through Climate Network. Pro-bono advisory for Smira Foundation (Cloth donation platform; Channeled 70% increase in new donors)