Harshal Gajjar

Bay Area, CA (404) 319-0116 mail@harshalgajjar.com

Senior Software Developer

GenAl | ML | Forward Deployed Full-stack | Open-ended Experimental Projects | UI & Design | Developer Productivity centric

EXPERIENCE -



C3 AI
Ian 2023 -

Jan 2023 – Present (And summer 2022) Software Developer Jun 2024 - Present

Associate Software Developer Jan 2023 - May 2024

- Built multiple entirely custom GenAl applications: Riverside County Law enforcement (Aided form filling from 911 distress calls), Aided product complaint classification for Boston Scientific's endoscopy division
- Built C3's Agriculture Production Schedule Optimization app (generating a revenue of over \$600k from 2 customers) involving frontend, backend, data model, data ingestion pipeline, and mixed integer formulation, and constant customer interactions
- Built C3's web scraping infrastructure for all data scraping
- Built multiple **UI components powering production applications** like GenAl, Energy management, ESG



CLAWS Lab

(at GeorgiaTech) Dec 2021 - Apr 2023 **Technology Advisor** Jan 2023 - Apr 2023

Graduate Research Assistant

Dec 2021 - Dec 2022

• Built a system for better capturing the flow of online misinformation by collecting, processing and visualizing massive amounts of social media content generated online. The aim is creating a scalable platform for defending against misinformation where humans and ML models work together to reduce human load and



Axis Technical Group

Oct 2020 - Jul 2021

ML Researcher

Oct 2020 - Jul 2021

handle concept drift. This project has been funded by NSF. • Made (Bahdanau and Luong) attention layers, transformer models from scratch in TensorFlow using its functional API for OCR and handwriting recognition. Reached an accuracy better than Tesseract and matching that of OmniPage, with a word error rate of <2.1% and line error rate of <4% on the internal datasets. This work



GMD

Consultants

2018 - 2020

Applied ML & Software **Engineer**

Summer 2020 Summer 2019 Summer 2018

- gave Axis the ability to process any language/script. • Built a fully automated AI traffic video analytics software (speeds/paths/counts of vehicles in videos) using YOLOv4 and PySide2 with ability to manage license keys and remote processing on powerful machines. This software is saving GMD Consultants more than Rs. 20k (\$250) per day on the human labor costs.
- Built a software to generate constant time commute polygons for a given time, start/end point, and mode of transport (road, walk, transit). Highly accurate polygons generated using Google Maps API, and Here Maps used by GMD Consultants to aid clients like IKEA strategically position stores. My work generated over Rs. 8L (\$11k) of revenue just during my period of involvement



Wolfram Research

2018 - 2020

Summer Camp Instructor

Summer 2020 Summer 2019

Intern

Summer 2018

 Designed and built algorithm for tiling of arbitrary shaped tiles using computer vision to mimic how we do it with our vision

 Sponsored trips to US for 2 talks on image processing and optimized data importing in Wolfram Language each year. Mentored 9 machine learning projects (ranging from character recognition to transfer learning on GPT2)

SKILLS -

GenAI – LLMs, RAGs, Agents, Prompts (library agnostic), Attention to Detail, Customer relations, Process Design & Documentation, Full-stack development (library agnostic), Machine learning (library agnostic), Mixed integer optimization formulations (library agnostic), Automations and productivity enhancements

EDUCATION -



Georgia Institute of Technology

Aug 2021 - Dec 2022

Master of Science in Computer Science (ML Specialization)

Helping curb misinformation in CLAWs lab, CreateX (crypto entrepreneurship), Caving



Indian Institute of Technology

Aug 2016 - May 2020

Bachelor of Technology in Computer Science and Engineering Exploring the NP hard problem in graph theory (and finding polynomial algorithms for constrained cases)