Taha Wasiq









github.com/TahaWasia

EDUCATION

The University of Illinois Urbana Champaign

Master of Computer Science

Coursework, Focus in Artificial Intelligence

The University of Texas at Dallas

August 2019 - May 2024

August 2024 – December 2025

B.S. Information Technology and Systems: Minor in Computer Science

Honors/Scholarships: Academic Excellence Scholar, JSOM Freshman Excellence Scholar

The University of Texas at Austin

January 2022 - August 2022

PG Certification Program in Artificial Intelligence and Machine Learning: Business Applications:

- Application of Statistics, Data Science, and Machine Learning techniques through Python programming
- Completed 9 projects based on real-world business applications

PROFESSIONAL EXPERIENCE

Al Engineer Intern | IBM - New York, NY

May 2024 – Present

- Wrote 3 backend tools using Python and exposed FastAPI endpoints that implemented OCR, page orientation detection, and text blur detection using OpenCV libraries with <5% margin error
- Implemented each tool into an agentic AI workflow to automate Quality control for Wells Fargo's loan application process and successfully reduce Loan Analyst review time by 80%
- Built and deployed a GPU-accelerated live speech-to-text endpoint on CodeEngine using IBM's 8B-parameter Speech model
- Integrated the speech-to-text endpoint into an agentic AI workflow with parallel processing for summarization, sentiment analysis, and recommended actions—reducing support delivery time by 50%
- Built an Agentic RAG system using Langflow and AstraDB, integrating 100+ vectorized annual reports and 10-K filings; deployed as a custom tool within Watsonx Orchestrate, enabling multi-tool agent workflows with sub-2s response latency.
- Led a technical team of interns to develop a Full-Stack internal marketplace application, which led to buy-in from C-Suite

Full-stack Developer & Co-Founder | NDA Analyst - San Francisco, CA

January 2025 - Present

- Creating a software to streamline the NDA contract negotiation process with a FastAPI Python backend that currently has 3k+ lines of code, and a React JavaScript Frontend with 5 pages currently deployed
- Integrated Supabase (PostgreSQL + storage), Google Firebase Auth, GitHub, Vercel, and Render into a seamless CI/CD workflow, automating database migrations and deployments across those 5 platforms to reduce deployment time by 40%
- Implementing document editing features including redline tracking, version control, and automated email notifications

Al Engineer Intern | IBM - San Francisco, CA

May 2024 - Aug 2024

- Performed data cleaning, model tuning, and prompt engineering in Python Notebooks and compared outputs from 9 Watsonx.ai large language models in a RAG use case for Honda vehicle design
- Utilized IBM prompt lab to generate 20 examples of input and output data in Python Dictionary format to be used for RAG metric testing in developing a watsonx.gov dashboard for PepsiCo's Gen AI models

Technical Sales Engineer Intern | IBM - Coppell, TX

May 2023 – Aug 2023

- Researched the applications of AI and ML in IBM's broad range of 7+ cybersecurity products
- Developed 7 innovative use cases, using my knowledge of AI & ML, that I presented to IBM Cybersecurity sales managers

Founder/Operator | TWS Shoe Company - Murphy, TX

January 2022 - May 2023

- Operated my own shoe re-selling business and brought 20k in revenue
- Programmed a software in C# that used a web-driver to acquire inventory from the Footlocker website

Account Manager | Peek Consulting Group - Dallas, TX

April 2021 - August 2021

- Generated recurring yearly sales revenue of approximately \$71,000 on behalf of AT&T
- Negotiated benefits of AT&T services to over 2,000 businesses and corporations through cold calling

TECHNICAL SKILLS

Coding Languages: Python, Java, JavaScript, TypeScript, SQL, HTML/CSS, XML

Frameworks/Tools: FastAPI, React.js, Supabase, Firebase, OpenCV, LangFlow, LangChain, Pandas, NumPy, Matplotlib, SciPy, Blender

Concepts: Machine Learning, Generative AI, Data Science, Backend/Frontend Development, CI/CD, Application Development

Other: Tableau, Microsoft Office, Git, Vercel, Render

Computational Photography Projects | Python, NumPy, OpenCV, SciPy, Blender

- **Implemented texture synthesis pipeline** via dynamic programming-based image quilting, generating realistic imagery, and processing 8+ texture samples across 2,015 lines of implementation code
- **Developed Gradient Domain Processing** using Poisson equation solvers and Laplacian pyramids across 1,925 lines of python notebook code for seamless object insertion and blending
- **Built HDR reconstruction and Object rendering system** by merging 6+ exposure sequences with equirectangular environment mapping, integrating Blender's Cycles engine for GPU-accelerated ray-traced rendering

Full-Stack Weather Application

- Built an Android app in a team of 5 Software Engineers, enabling users to add global locations, view them on Google Maps, fetch real-time weather data via API, and display insights using an LLM API
- Developed 10 backend Java files and 10 frontend XML files; implemented both manual and LLM-generated Gradle testing

Computer Vision- Brain Tumor Classification

- Constructed an ML model on a dataset of 1000+ images that identifies Brain MRI Scans with or without a tumor
- Utilized Data Augmentation then a 16-layer Convolutional Neural Network with Dropout, Pooling, and other Deep Learning concepts to achieve accuracy of 82%
- Leveraged the open-source VGG16 CNN model, which achieved 95% accuracy on the validation set

NLP- Twitter U.S. Airline Sentiment

- Applied Python, Tokenization, Vectorization, and other Natural Language Processing techniques to identify positive, neutral, and negative sentiments toward U.S. Airlines based on 15 parameters of over 14,000 customer tweets
- Developed an ML model that helps U.S. Airlines identify customer sentiment and achieved accuracy of 80%

LEADERSHIP & INVOLVEMENT

Rise Relief (Water Charity Non-Profit) – Event Coordinator
Racing Dallas FC (Semi-Professional Soccer Club) – Team Member
Formula Racing Society of Automotive Engineers UTD – Software Team Member
Afghan Refugee ESL Program – Volunteer ESL Tutor

May 2023 – Present August 2023 – February 2024 August 2023 – January 2024 April 2022 – July 2022

ADDITIONAL INFORMATION

Languages: English, Urdu, Hindi, Arabic (Intermediate)

Eligibility: U.S. Citizen