Zain Ghazanfar

U.S. Citizen | Atlanta, GA | 470-621-2799 | z.ghazanfar922@gmail.com | linkedin.com/in/zainghazanfar

Education

Georgia Institute of Technology — Expected Dec 2026
B.S. in Computer Science, Minor in Business Leadership — *Atlanta, GA*
Courses: Data Structures & Algorithms, Object-Oriented Principles, Intro to AI, Computer Systems & Networks
Awards: Zell Miller Scholarship, Dean's List | *GPA*: 3.94/4.0

Experience

Incoming Software Engineer Intern — June 2025 – Aug 2025
Arrowstreet Capital — *Boston, MA*

Software Engineer (Co-Founder) — Jan 2024 – Present
Zaphor Solutions — *Alpharetta, GA*

- Scaled an Amazon business to over $200K in revenue through FBM and FBA by building Python-based automation systems to track inventory, analyze sales trends, and optimize pricing across 70+ SKUs
- Used Python and keyword data analysis to restructure Amazon PPC ad groups, improving conversion rate by 20% and reducing ACoS across multiple listings
- Developed forecasting models to maintain a 95% in-stock rate, automating reorder logic and vendor coordination

Software Engineering Intern — Jul 2024 – Present
Georgia Institute of Technology, ACT Lab — *Atlanta, GA*

- Built and optimized deep and reinforcement learning models (CNN, RNN, DQN) in PyTorch to improve trajectory planning and lane changes
- Led a subteam of 3 undergraduates in refining CNN and DQN models for behavioral cloning and control tasks
- Utilized GAIL and Transformer-based models to simulate and predict human-like driving behavior in connected vehicles
- Integrated CARLA simulator to create high-fidelity training environments for autonomous agents in various scenarios

Software Engineer Consultant — Dec 2022 – May 2024
Endor Media

- Engineered scalable AI-powered automation scripts using Python to streamline client acquisition workflows
- Designed and deployed interactive data dashboards by integrating GoHighLevel APIs with custom frontend components, enabling real-time visualization of campaign KPIs, lead generation metrics, and sales performance
- Improved website speeds and SEO by implementing server-side rendering, minimizing render-blocking resources, and optimizing JavaScript bundles, resulting in a 2.3x faster load time and enhanced Google Core Web Vitals

Applied Data Science Researcher — Jan 2023 – May 2023
Georgia Institute of Technology, SMART Lab — *Atlanta, GA*

- Built Jupyter-based Python scripts to analyze switching dynamics in PZT thin films, improving research efficiency
- Developed custom data visualization tools using Matplotlib to effectively display experimental findings and trends
- Implemented GIWAXS dataframes and pandas to classify, preprocess, and analyze large-scale research datasets

Projects

Piclasify | *Python, TensorFlow, OpenCV, Pandas, Scikit-Learn, Matplotlib*

- Fine-tuned a pre-trained VGG16 model for image classification on CIFAR-10, achieving nearly 85% accuracy
- Built a reproducible data preprocessing pipeline using OpenCV and Pandas to normalize, augment, and prepare image data for model training
- Improved model generalization by conducting systematic hyperparameter optimization across dropout rates, batch sizes, and learning rates using TensorFlow callbacks to prevent overfitting and accelerate convergence

Awards and Achievements

Eagle Scout — Jun 2023
National Merit Semifinalist — Sep 2022

Skills

Languages: Python, C, C++, Java, JavaScript, TypeScript, Go, HTML/CSS, Swift, R, Assembly, LaTeX
Frameworks & Tools: AWS, Docker, React, Node.js, Flask, FastAPI, Git, JUnit, Supabase, MongoDB, PostgreSQL, SQLite, TensorFlow, PyTorch, OpenCV
Concepts: Machine Learning, REST APIs, Cloud Infrastructure, CI/CD, Web Development, Deployment, Concurrency
Soft Skills: Agile Methodology, Collaboration, Leadership, Communication, Problem Solving