

# Zain Ghazanfar

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## EDUCATION

<b>Georgia Institute of Technology</b> <i>B.S. in Computer Science, Minor in Business Leadership</i> <i>Courses:</i> Data Structures & Algorithms, Object-Oriented Principles, Intro to AI, Computer Systems & Networks <i>Awards:</i> Zell Miller Scholarship, Dean's List   <i>GPA:</i> 3.98/4.0	Expected Dec 2026 Atlanta, GA
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## EXPERIENCE

<b>Incoming Software Engineer Intern</b> <i>Arrowstreet Capital</i>	June 2025 – Aug 2025 Boston, MA
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<b>Software Engineer (Co-Founder)</b> <i>Zaphor Solutions</i>	Jan 2024 – Present Alpharetta, GA
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- 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

<b>Software Engineering Intern</b> <i>Georgia Institute of Technology, ACT Lab</i>	Jul 2024 – Present Atlanta, GA
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- 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

<b>Software Engineer Consultant</b> <i>Endor Media</i>	Dec 2022 – May 2024
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- 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

<b>Applied Data Science Researcher</b> <i>Georgia Institute of Technology, SMART Lab</i>	Jan 2023 – May 2023 Atlanta, GA
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- 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

<b>Piclasify</b>   <i>Python, TensorFlow, OpenCV, Pandas, Scikit-Learn, Matplotlib</i>
<ul style="list-style-type: none"><li>• Fine-tuned a pre-trained VGG16 model for image classification on CIFAR-10, achieving nearly 85% accuracy</li><li>• Built a reproducible data preprocessing pipeline using OpenCV and Pandas to normalize, augment, and prepare image data for model training</li><li>• 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</li></ul>

## AWARDS AND ACHIEVEMENTS

<b>Eagle Scout</b>	Jun 2023
<b>National Merit Semifinalist</b>	Sep 2022

## SKILLS

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