Dylan Alexander

Software Engineer

(770) 343-1748 dylanjalexander2@gmail.com GitHub LinkedIn

Profile

Innovative software engineer with expertise in GPU-accelerated ML systems and high-performance microservices. A leader in code standardization and scalability, driving enterprise AI adoption through precision engineering and technical mentorship.

Education

Kennesaw State University 2021 – 2023
Computer Science, Concentration in AI & ML
University of Georgia 2024 – 2026
Professional Master's in Business Administration

Experience

April 2022 – Present | **R&D Software Engineer** | NICE Ltd. | *Dunwoody, GA*

- ***Overview***: Lead Developer of an enterprise-level Conversational Analytics application – a gRPC microservice in Python utilizing Embedding Models & LLMs. Oversaw architectural strategy, actively led code contributions, & managed corresponding CI/CD pipelines in containerized environments, running on AWS ECS.
- ***Productization of Research Tools***: Transformed NLP researcher POCs into scalable application features. Leveraged an in-depth understanding of NLP tasks, data flow, and multiprocessing techniques to optimize application performance.
- ***ML Model Lifecycle Management***: Managed all stages of ML Model Lifecycles in different production environments, including model development, deployment, analysis, and tuning to optimize cloud resource consumption.
- ***Cross-Functional Collaboration***: Acted as a key interface between product-facing teams and research groups, effectively communicating technical limitations and business needs. Delivered complex technical information to non-technical stakeholders.
- ***Mentorship***: Mentored junior engineers in design implementation, automated testing, and application deployment. Broadening their skillset through code reviews, pair programming, and emphasis on code quality and standards.

Mar 2021 – April 2022 | **R&D Software Developer** | Carter + Clark | *Duluth, GA*

- ***Algorithm Optimization***: Streamlined the autonomous generation of Lots, House Plans, and Area Calculations for Permit Drawings – ensuring spatially accurate placement of Drainage, Utility, and Erosion Control elements.
- ***3D Programming***: Kept OOP design within a procedural codebase while using AutoCAD .NET API for 3D space manipulation.
- ***Open-Source Contribution***: Actively contributed to AutoCAD community forums, enhancing open-source projects, and sharing insights on algorithm optimization.

Jun 2018 – Jun 2020 | **Geospatial Engineer** |173rd Airborne Brigade, US Army | *Vicenza, Italy*

- ***Geospatial Data Analysis***: Employed GeoPandas, ArcPy, and other GIS Python libraries for the analysis and organization of extensive geospatial datasets, supporting dynamically updating applications.
- ***GIS Product Delivery***: Delivered a diverse set of GIS and imagery products, specifically designed to support Combat Leaders in tactical operations. Performed in high-stress conditions during airborne operations.

Leadership & Impact (NICE)

- ***GPU-Accelerated Microservice Optimization***: Led the performance tuning of a Python gRPC microservice by integrating CUDA-enabled parallelization and implementing asynchronous streaming for inference requests. Enhancements reduced end-to-end response latency by 35% and minimized GPU memory fragmentation.
- ***Code Standardization & Team Growth***: Drove code uniformity initiatives - developed a comprehensive Python best practices guide and a modular project template, streamlining onboarding and accelerating development consistency. Played a key role in hiring and scaling the engineering team, conducting technical interviews and evaluating candidates to ensure alignment with team standards and technical excellence.