

DYLAN ALEXANDER

Senior Machine Learning Engineer

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PROFILE

Senior Machine Learning Engineer specializing in productizing researcher prototypes into scalable, GPU accelerated microservices. Recognized for delivering business-aligned AI solutions by uniting researchers with product management.

PROFESSIONAL EXPERIENCE

[NiCE](#) (NASDAQ: NICE) | SENIOR R&D SOFTWARE ENGINEER | Atlanta, GA Apr 2022 – Present

Conversational Analytics API (*Python, gRPC, Docker, SentenceTransformers, FAISS, AWS Bedrock, AWS ECS, S3*)

- **Lead development** of 'Topic Detection' API, a Python microservice embedded across flagship CXOne Platform, serving analytics to 1000+ enterprise clients and processing millions of conversations daily.
- **Productized NLP researcher POCs** into containerized applications that scaled into production-ready services. Leveraged GPU optimization with NLP tasks to improve application throughput by orders of magnitude.
- **Architected core ML workflows** by bridging gaps between product and research teams; improving accuracy of topic detection models across verticals, increasing trust in analytics, and driving adoption of advanced API features.
- **Standardized research-to-production pipelines** by creating a Python gRPC template repo adopted by research teams, reducing prototype-to-deployment from months to weeks, setting new engineering standards for application delivery.
- **Benchmarked application performance** at production scale through sandbox pipelines, logging latency, throughput, and GPU/CPU utilization.

[Carter + Clark](#) | R&D SOFTWARE ENGINEER | Duluth, GA Mar 2021 – Apr 2022

Permit Drawing Automation Platform (*C#.NET Framework, AutoCAD .NET API, Jenkins*)

- **Engineered DynamiCAD**, Carter + Clark's in-house permit drawing automation tool, adopted company-wide to process house plans/lots for major home builders.
- **Reduced manual drafting time by ~78%** (1.5 hrs -> 20 mins) by designing and deploying geometric computation algorithms to automate the generation of borders, footers, and spatially accurate lot/house plans.
- **Developed advanced spatial algorithms** (rotation, scaling, centering) using OOP design, ensuring accuracy across varying lot orientations and neighborhood scales.
- **Drove iterative development and release cycles** by collaborating with drafting teams to refine requirements, implementing integration/unit tests and managing CI/CD pipelines.

[ManDeo Consultancy](#) | FULL STACK DEVELOPER | Atlanta, GA Jun 2020 – Mar 2021

E-Commerce & Web App Development (*LAMP Stack, JavaScript, PHP, MySQL, Square API*)

- Designed and launched 10+ client-facing web apps; most notably Scofflaw Brewing's [website](#), integrating an online store with Square that enabled direct merchandise sales.

[173rd Airborne Brigade, U.S. Army](#) | GEOSPATIAL ENGINEER | Vicenza, Italy Jun 2018 – Jun 2020

Geospatial Intelligence & Data Engineering (*Python, GeoPandas, ArcGIS, Satellite Imagery*)

- Developed pipelines for cleaning, organizing, and analyzing geospatial datasets, enabling detection of troop movement, terrain usage, and infrastructure changes.
- Delivered mission-critical cartographic products (topographic maps, satellite imagery) to aid NATO/EUCOM operational planning.

EDUCATION & CERTIFICATIONS

PROFESSIONAL MBA | Leadership | University of Georgia

BACHELOR OF SCIENCE | Computer Science – AI & ML | Kennesaw State University

AWS CLOUD PRACTITIONER

Mar 2021

[GEOINT PROFESSIONAL](#)

Nov 2020

SECURITY CLEARANCE | TS/SCI

Jan 2019