Steven DeFalco

✉ stevencdefalco@gmail.com · 📞 732-778-4102 · **in** Steven DeFalco · **○** StevenDeFalco

Education

Stevens Institute of Technology	Hoboken, NJ
MBA & MS in Applied Artificial Intelligence	*January 2025 – May 2026*
BS in Computer Science, Highest Honors (GPA: 3.86)	*September 2021 – December 2024*
Marine Academy of Science and Technology	Highlands, NJ

Experience

TCE — Great Neck, NY

AI Solutions Engineer — *May 2025 - Present*

- Led end-to-end redesign of an Azure-native AI chatbot for internal engineers, executives, and estimators—integrating query rewriting and hybrid semantic/vector retrieval (Azure AI Search, OpenAI API, Python, LlamaIndex). Boosted *good-answer rate* from 50% → 98% and *answer rate* from 74% → 98% on a 100-query A/B test, enabling rapid access to insights across hundreds of sensitive contract and technical documents, ensuring data privacy compliance.
- Fully rebuilt document ingestion & RAG pipeline (LlamaParse → Markdown, custom chunking, embeddings; Azure Blob + SQL; Azure AI Search index), increasing *top-1 citation relevance rate* from 32% → 76% and *highlight accuracy rate* from 10% → 56%. Collaborated with non-technical stakeholders to define requirements and present results.
- Designed, developed, and deployed a tunnel-clearance calculator PWA in Ionic/React (TypeScript) for offline field use, replacing manual and paper-based clearance checks. Enabled in-field safety verification for MTA-regulated tunnel installations, reducing turnaround and mitigating risk of costly compliance violations. Delivered native-like UX with offline caching, in-app updates, and CSV export in owner-specified format, hosted on Azure.

Innovation Engineering Intern — *May 2024 - August 2024*

- Automated migration of 1,000+ internal LMS courses using Python (Pandas, APIs, Playwright), eliminating manual effort and proving a scalable automation approach.
- Built Azure Timer Functions to sync HR and LMS data in near real time, enabling accurate mass training assignments.
- Delivered a secure React portal for hosting site drone imagery, providing open team access and avoiding licensing costs.

Pixel Light Digital Media — Lyndhurst, NJ

Software Testing & Quality Assurance Analyst — *June 2022 - August 2022*

- Led testing of real-time computer vision system for convention booth engagement tracking; improved distance prediction accuracy to within 2 ft. in 50 ft. range. Produced business insights using 51k+ data points to optimize booth layouts and increase marketing ROI. Collaborated with developers to deliver stability and reliability to enterprise clients.

Stevens Institute of Technology — Hoboken, NJ

Computer Science Course Assistant — *September 2022 - May 2023*

- Led labs for Data Structures courses with live coding and personalized instruction, contributing to a 98% pass rate.

Projects

@predictMLB (Summer 2023): Built and deployed an autonomous X/Twitter bot on AWS Lightsail (Python, MLBStats-API, cron) that posts same-day MLB game predictions using a custom LightGBM model trained on over 5 years of historical data with fully automated data pipelines, achieving 66% predictive accuracy on a 1,100-game backtest.

Coursework

NLP, Computer Vision, Deep Learning, Database Management, Statistics, Data Structures & Algorithms

Skills and Technologies

Languages: Python, SQL, TypeScript, JavaScript
Technologies: Azure, Azure AI Search, Azure Functions, Azure AI Foundry, OpenAI API, LlamaIndex/LlamaParse, LLMs, MCPs, Ionic/React (PWA), Git, CI/CD, Linux, Prompt Engineering, LaTeX

Leadership & Community

Vice-President of Alpha Sigma Phi (Alpha Tau): Led a 40-member chapter; oversaw 25 events/semester; achieved a 91% median attendance rate; coordinated event logistics and scheduling; oversaw conflict resolution.