





MARSHALL LANNING

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 MLLANN01

PROFILE

Software Engineering leader with expertise in full-stack development, cloud platforms, real-time distributed systems, and AI enablement. Proven ability to lead high-performing teams that deliver innovative solutions across enterprise-scale logistics operations. Passionate about aligning software delivery with measurable business outcomes and coaching IT professionals and future leaders

EDUCATION

Master of Business Administration (MBA)
Indiana University Southeast

Master of Science, Computer Science & Engineering
University of Louisville

Bachelor of Science, Computer Science & Engineering
University of Louisville

SKILLS

DevOps
Infrastructure: Linux, Windows, OpenShift, Kubernetes, Docker, Azure, Google Cloud Platform
Monitoring: Log Insight, Prometheus, Grafana
Tools: Azure DevOps, Jenkins, PowerShell, Bash
Concepts: CI/CD, Micro-services, Infrastructure as Code (IaC)

DataOps
Cloud Services: ActiveMQ, Azure Synapse Analytics, PUB/SUB, Big Query
Visualization: Grafana, PowerBI

Databases
Couchbase, MySQL, MS SQL Server, MongoDB, and DB2

Languages
C#, Python, Java, C, C++, Javascript, Typescript, HTML, CSS

Frameworks
DOTNET, Flask, SpringBoot, Node, Angular, React, Vue, ASP .NET, JSP, Cordova, React Native, Xamarin, Apache Camel

Machine Learning and AI
LLM Fine Tuning, Prompt Engineering, RAG, Neural Networks, LangChain, Vector DBs

PROFESSIONAL EXPERIENCE

Manager, Software Engineering - *United Parcel Service* - January 2023 - Present

- Improved operational insight and reduced investigation time by 80% by designing and implementing a generative AI assistant for transportation systems event auditing.
- Delivered \$100M+ in operational savings through administrative role consolidation by building autonomous agents using Python, LangChain, and Gemini to resolve yard and dispatching exceptions.
- Unlocked advanced efficiency gains by \$75M+ by developing a workforce scheduling optimizer for UPS feeder operations.
- Fostering a collaborative environment amongst product and engineering teams, mitigating risks, and ensuring security and compliance standards were met with on time delivery.
- Conducting performance reviews, facilitating career growth, and executing coaching methodologies resulting in five different promotions for my direct reports, three of which were for leadership roles at UPS.

Lead Software Engineer - *United Parcel Service* - July 2021 - January 2023

- Designed an automated yard control system that replaces 80% of manual routing decisions; design currently under patent review.
- Engineered real-time ETL pipelines to ingest edge/IOT and system data into BigQuery, accelerating planning decisions and data accessibility.
- Championed DevOps and DataOps modernization efforts that improved deployment frequency and cut cycle time by 40%.
- Mentored/coached cross-level engineers and embedded best practices in CI/CD and infrastructure automation.

Senior Software Engineer - *United Parcel Service* - June 2020 - July 2021

- Developed a real time GPS event ETL pipeline to track trailer assets, enhancing visibility and improving asset utilization.
- Advocated for emerging technologies and mentored junior engineers in design, architecture, and best practices.

Software Engineer I & II - *United Parcel Service* - January 2019 - June 2020

- Led backend development for a digital load manifest system, eliminating manual FAA documentation processes, reducing pre-flight time and manual error.
- Delivered Java based ETL pipelines to optimize cargo placement on UPS aircraft, increasing load efficiency and contributing to improved on-time flight percentages.

Software Engineering Co-Op - *United Parcel Service* - January 2017 - June 2019

- Developed REST APIs and microservices in Java to support scalable load tracking and automated dispatch integration.
- Gained hands-on experience with Agile methodologies, OOP concepts, DevOps practices, and modern security standards.

PERSONAL PROJECTS

- Horse Racing AI Assistant – Built a prediction engine trained on past performance PDFs using RAG + LLM fine-tuning to identify probable winners.
- LLM-Based Brand Automation – Developed an AI tool to auto-generate and schedule social media content across multiple brands.
- Neural Digit Classifier – Trained Softmax Regression and deep neural models in Python to recognize handwritten digits.
- RFID Security System – Deployed a Pi-based access system with web interface for real-time logging and user provisioning.
- Genetic Algorithm Stock Optimizer – Built a C# app to optimize stock portfolios with genetic algorithm visualization and historical trading data.