

SUMMARY

Backend software engineer focused on process automation and enhancing system performance. Experience in building scalable microservices, improving service stability, and automating developer workflows.

WORK EXPERIENCE

Software Engineering Intern

May 2024 – Sep 2024

ICATT Consulting, Inc.

Herndon, VA

- Built an automated reporting service with **Python** and **Flask**, triggered by **AWS EventBridge**, saving hours of manual work weekly.
- Refactored a **Node.js** service boosting test coverage to 90% with **Jest** and optimizing memory usage.
- Optimized **MySQL** database performance by normalizing tables and refactoring queries, improving speed times by over 200%.
- Built a **Python CLI tool** to automate environment setup, reducing manual configuration for new engineers.
- Developed and deployed **Node.js microservices** in **Docker containers on AWS** to integrate financial APIs.

IBM Accelerate Program (Capstone Project)

May 2024 – Jul 2024

IBM

Remote

- **Led front-end development** in building a responsive **React** UI to showcase AI-powered inventory tracking and analytics features.

EDUCATION

University of Maryland

Graduated August 2025

Bachelor of Science, Computer Science, GPA: 3.5

College Park, MD

Relevant Coursework: Algorithms, Software Engineering, Data Science, Database Management

SKILLS

Programming Languages: Python, C++, Java, JavaScript

Cloud, DevOps & CI/CD: AWS (EC2, S3, RDS, EventBridge), Docker, Linux, Git, GitHub Actions

Frameworks & Libraries: React, Flask, Node.js, Express, Pandas

Databases & Tools: MySQL, NoSQL (MongoDB), Postman

Testing & APIs: PyTest, Jest, REST APIs

PROJECTS

Delivery Route Optimizer

Python, Flask, Docker, REST API

- Built a **Python** service to find optimal multi-stop routes using pathfinding algorithms.
- Created a **Flask REST API** to return optimized routes from addresses via OpenStreetMap.
- Containerized the application with **Docker** for standardized development and deployment.

Cross-Platform Playlist Migrator

Node.js, React, Express, OAuth 2.0

- Built a full-stack app (**Node.js, React**) to migrate playlists between Spotify and Apple Music.
- Handled secure API access and user authentication for third-party platforms using **OAuth 2.0**.
- Managed asynchronous API calls with **Express** to efficiently fetch and match track data.

Open Source Contributor (Jackson Databind)

Java, Jackson, Maven, Git

- Fixed a bug in Jackson's deserializer that failed to correctly map JSON to a Java Record class.
- Submitted a patch with regression tests to ensure correct future handling of Java Records.
- Collaborated with the core team on GitHub to refine and merge the proposed solution.