

AMADOU DIALLO

907.480.8444 | Greater Chicago Area (Wheaton, IL) | [Email](#) | [LinkedIn](#) | [GitHub](#) | [amadoudiallo.dev](#)

SOFTWARE DEVELOPMENT ENGINEER

Backend Engineering | AWS Platforms & Infrastructure Engineering | Cloud-Native Systems & DevOps

Results-driven Software Engineer with experience at Amazon building scalable backend systems, optimizing infrastructure, and automating ML pipelines. Proven in ownership, mentorship, and collaboration across high-impact teams. Skilled in Python, Java, AWS, and expert in leveraging LLMs and AI-powered tools to accelerate development and enhance productivity. Strong foundation in data engineering, infrastructure as code, and cloud-native systems. Passionate about building reliable, user-focused software that solves real-world problems and believes in technology as a driver for accessibility, learning, and innovation.

WORK EXPERIENCE

Amazon.com, Inc

Bellevue, WA

Software Development Engineer, Middle Mile Products and Technology

08/2022 – 08/2023

Led data and infrastructure optimizations at Amazon, enabling millions in annual savings while mentoring engineers and improving system reliability across seven production services.

- Led a cost-optimization initiative that eliminated **\$40K** in annual **AWS AppConfig** expenses while improving service reliability and operational efficiency
- Designed and implemented data models in **Java** and **Python** for scheduling and routing optimization, driving a system that enabled **\$6M+** yearly savings
- Managed on-call operations for seven **backend microservices**, proactively resolving issues and driving long-term improvements in system stability.
- Mentored 3+ junior engineers on **AWS** best practices and **microservices architecture**, accelerating their ramp-up with the codebase, internal services, and on-call ticket resolution processes
- Delivered 10+ technical training sessions on **AWS** technologies and **ML services**, significantly enhancing team-wide technical proficiency

Amazon.com, Inc

Bellevue, WA

Software Development Engineer Intern, Middle Mile Products and Technology

06/2021 – 09/2021

Deployed a CI/CD ML pipeline that improved model performance by 20% and reduced deployment times, saving 12 hours monthly.

- Collaborated with research scientists to develop a **ML model** that optimized resource allocation and reduced outsourcing across thousands of weekly load shipments
- Built an automated ML pipeline using **AWS (SageMaker, AutoPilot, AppConfig, EventBridge)**, boosting model AUC from 0.75 to 0.94
- Designed modular, reusable **JupyterNotebook** templates with **Python** scripts and **AppConfig** deployments to streamline weekly model retraining, enabling scalable deployment to customer-facing endpoints and cutting deployment time by 12+ hours/month

EDUCATION

New York University

New York City, NY

B.S. (Computer Science), GPA: 3.64

09/2018 – 05/2022

ADDITIONAL EDUCATION

DarusSalam Seminary

Lombard, IL

Tanwīr Intensive (Advanced Sacred Sciences and Spirituality)

08/2023 – 04/2025

Completed immersive training in classical Arabic and ethical philosophy, achieving advanced reading/writing proficiency and studying moral philosophy, spirituality, and cross-cultural thought.

SKILLS

Languages: Python, Java, Java Spring, C#, TypeScript, SQL/NoSQL

Cloud: AWS (S3, Lambda, SageMaker, CDK, AppConfig, CloudWatch EC2, DynamoDB), Cloudflare (R2, Workers)

DevOps: GitHub Actions, Travis CI, Infrastructure as Code(CDK), CI/CD, Agile (Scrum, Kanban), Unit Testing, SDLC, JUnit

Systems: Microservices, REST APIs, VPC, API Gateway, Load Balancing

Tools: Jupyter, AppConfig, Git, Linux, Documentation