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

Software Development Engineer, Middle Mile Products and Technology

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

Software Development Engineer Intern, Middle Mile Products and Technology

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**

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

# Additional Education

### DarusSalam Seminary

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: Java, Python, C#, TypeScript

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

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

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

Tools: Jupyter, AppConfig, Git, Linux

Bellevue, WA 08/2022 – 08/2023

Bellevue, WA 06/2021 – 09/2021

New York City, NY 09/2018 – 05/2022

Lombard, IL