

# Amithesh Sathish

amitheshsathish@gmail.com — +1-319-936-9922 — linkedin.com/in/ami03sa — github.com/Ami03sa

## Summary

Software Engineer with experience in **cloud systems, large-scale data pipelines, and AI-powered applications**. Internships at Warner Music Group and Quantum Leap Technologies with proven impact on **scalability, reliability, and cost optimization**. Strong background in backend development, data engineering, and distributed systems, complemented by AI/ML expertise. U.S. Citizen.

## Core Skills

- **Languages:** Python, SQL, JavaScript, Java, C++, Bash
- **Backend/Data:** Apache Spark, REST APIs, MySQL, PostgreSQL, ETL Pipelines
- **Frontend:** React.js, JavaScript, Streamlit, Flask
- **Cloud/DevOps:** AWS (Lambda, EC2), Docker, Terraform, GitHub Actions, GitLab, Git
- **Concepts:** Distributed Systems, ML Pipelines, Debugging, Software Testing, CI/CD

## Education

### The University of Iowa

Bachelor of Science in Computer Science

Iowa City, IA

*Expected June 2025*

Relevant Coursework: Database Systems, Computer Organization, Data Structures & Algorithms, Computer Networks, Probability & Statistics, Software Development

## Certifications

AWS Cloud Practitioner — DeepLearning.AI Prompt Engineering — Edureka AI/ML — Udemy Agentic AI

## Experience

### Quantum Leap Technologies

*Software Engineer Intern*

New York, NY

Dec. 2024 – Present

- Designed and deployed **Apache Spark ETL pipelines** integrated with PostgreSQL; reduced batch job runtime from **5 hrs → 3 hrs**.
- Optimized AWS EC2/Lambda infrastructure, cutting API latency by **20%** and scaling to **100k+ users**.
- Refactored React.js frontend components, improving load speed by **25%** and user engagement by **15%**.
- Collaborated on Generative AI workflows and ML pipelines, bridging backend and AI systems.

### Warner Music Group

*Software Engineer Intern*

New York, NY

Nov. 2023 – Mar. 2024

- Built and optimized **data pipelines** (Apache Spark, Pandas), reducing processing time by **40%**.
- Automated ad-targeting processes, lowering customer acquisition costs by **20%**.
- Developed ML models for ranking predictions using regression and ensemble methods; improved campaign efficiency.
- Partnered with marketing teams to integrate data-driven models into production systems.

## Projects

---

### Disaster Assistance Management System

- Built a full-stack web app (React, Flask, MySQL) to coordinate disaster relief requests and donor contributions.
- Implemented authentication, request/response matching, and role-based dashboards.

### OpenAI Projects (GitHub)

- Developed applications leveraging GPT APIs, LangChain, and RAG pipelines.
- Integrated Pinecone/FAISS search for scalable document retrieval.
- Deployed using Flask/Streamlit with real-time API integration.

## Awards & Leadership

---

- National Society of Black Engineers – Active Member, 2023–Present
- Dean's List, University of Iowa – 2023
- Hackathon Winner: GenAI Track, University of Iowa, 2024
- Led 3-person team for AI-driven project prototypes in campus AI club