

APURUPA VEMULA

apurupavemula@gmail.com • (954) 592-4167 • [apurupavemula.com](mailto:apurupavemula@gmail.com) • Atlanta, GA

EXPERIENCE

Software Engineer, Amazon Prime Video

Jan 2023 — Present

- Designed and implemented secure, scalable backend services and APIs on AWS to support authentication, payments, and AI-driven risk detection workflows.
- Integrated with REZCO, a machine learning system that predicts customer payment risk, exposing inference results through internal APIs and triggering real-time banner notifications for payment recovery
- Enhanced on-call operations by configuring internal AI agents for alert triage and automated investigation, reducing manual resolution time and improving system reliability.
- Developed observability frameworks for AI and platform services using metrics, logs, and traces to monitor inference latency, throughput, and system health.
- Automated CI/CD and infrastructure provisioning with CloudFormation and internal tools to streamline deployment and improve rollout safety.
- Performed load and integration testing to validate scalability and performance across high-traffic distributed systems.
- Collaborated with ML platform teams to manage API contracts, model versioning, and inference reliability, improving performance and reducing operational overhead.

Technologies: React, Java, AWS (Step Functions, Lambda, S3, DynamoDB, IAM), CI/CD

Software Engineer, Amazon Music

Jun 2022 — Dec 2022

- Designed and automated reporting pipelines using AWS Glue, Athena, and S3, reducing manual analysis effort by ~90% and increasing data freshness from weekly to daily updates.
- Built and optimized SQL scripts to generate and validate creator income and payment reports, improving accuracy and turnaround time for finance teams.

Technologies: AWS (Glue, Athena, S3), SQL, Data Pipelines, ETL Automation

Data Engineer, Bloom Insurance

May 2021 — Dec 2021

- Built ETL pipelines and interactive dashboards using SSIS, Python, and Power BI to improve reporting efficiency.

EDUCATION

Indiana University, Bloomington

2020 — 2022

Master of Data Science | GPA: 3.82/4

Hindustan University, India

2015 — 2019

Bachelor of Electronics & Communication Engineering | CGPA 9.52/10

TECHNICAL SKILLS

- Languages: Java, Python, SQL, React
- Cloud & DevOps: AWS (Lambda, Step Functions, Glue, Athena, DynamoDB, CloudFormation, S3, CloudWatch, IAM, API Gateway, Bedrock), CI/CD
- AI & Data Infrastructure: Model orchestration, AI agents, inference telemetry, data pipelines, ETL, observability, distributed systems, REST API design, authentication & authorization

LEADERSHIP & AWARDS

Chapter Lead, Amazon Women in Engineering Atlanta

2022 — Present

President, Data Science Club at IU

2021 — 2022

Luddy Outstanding Service Award

2022

IU Global Citizen Scholar Award

2021