# Adithya Thirumalai

🛡 San Jose, CA 🤳 669-295-9738 🛮 adithyathirumalai@sjsu.edu in /adithya-thirumalai 7 /adithyathirumalai1

### **Education**

San Jose State University, Master of Science in Software Engineering

Aug 2024 - May 2026

Coursework: Enterprise Distributed Systems, Software Systems Engineering, Data Mining, Deep Learning

University of Mumbai, India, Bachelor of Engineering in Computer Engineering

Aug 2017 - May 2021

Coursework: Operating Systems, Data Structures and Algorithms, Object-Oriented Programming, Discrete Mathematics, Database Management System, Computer Networks, Cloud Computing, Machine Learning

## **Work Experience**

May 2025 - Aug 2025 Amazon

Software Development Engineer Intern

- Designed and built coordinator system enabling 4 teams to standardize region definitions across microservices in Agile Scrum, improving consistency.
- Automated data release with AWS Lambda, EventBridge, DynamoDB, API Gateway, and IAM, cutting 50% related tickets by eliminating manual coordination.
- Saved  $\sim$ 12 hrs/week, ensuring 100% data consistency and boosting reliability across dependent services.

Accenture Feb 2022 - Sep 2023

Software Engineer

- Engineered scalable data pipelines using Apache NiFi, streamlining transfer of 1TB+ daily data into Hive, boosting pipeline efficiency by  $\sim$ 30%.
- Developed PySpark and Python scripts for ingestion summaries, proactive error logging, and disruption detection, minimizing manual monitoring by 2-3 hours/day and ensuring reliable large-scale processing.
- Refactored SQL queries to reduce cluster resource load by  $\sim$ 25%, accelerating query execution speed.
- Oversaw HDFS workflows handling terabyte-scale data daily, safeguarding data accuracy and availability under high-volume workloads.

#### Merkle (Previously Ugam Solutions)

Jul 2021 - Dec 2021

Associate Data Analyst

- Designed and implemented multi-layered data validation scripts for real-time customer data processing using Quantum, ensuring high accuracy and data integrity.
- Leveraged IBM SPSS to transform unstructured data into structured formats for analytics and ETL workflows.
- Mentored interns on scripting fundamentals and validation techniques, enhancing team automation capabilities.

## **Relevant Projects**

**Restaurant Finder Application** | React.js, Node.js, Express.js, AWS, MongoDB

• Built a full-stack application with RESTful APIs, enabling restaurant search, reviews, and management; integrated Maps API for location-based search.

Automated Pop Quiz Implementation System | Android, Java, GCP, Firebase

- Developed dual Teacher/Student apps enabling quiz creation, real-time tracking, and automated grading.
- Teacher app featured guiz formats, reports, and Firebase Firestore integration.
- Implemented secure access codes for student quizzes to mitigate cheating.

#### Technical Skills

Languages: Java, Python, C/C++, C#, HTML, CSS, Unix Bash, JavaScript, TypeScript, SQL

Frameworks: React, Unity, Node.js, Angular, Hadoop

Databases: MySQL, Oracle, MongoDB, PostgreSQL, DynamoDB

Cloud: AWS (EC2, ECS, S3, RDS, Lambda, EventBridge, API Gateway), GCP (Firestore)

Developer Tools: Git, GitHub, Maven, Gradle, Android Studio, Atlassian Jira