

# CHARITHA PALLI

+1(774)-528-9969|cpalli.dev@gmail.com|San Jose, CA

[LinkedIn](#)|[Github](#)|[Portfolio](#)

## PROFESSIONAL SUMMARY

Software Engineer with 4 years of experience designing and delivering production-grade backend systems and APIs. Strong in Java/Python, SQL, and object-oriented design, with hands-on experience building scalable services, optimizing database performance, and improving reliability through testing, logging, and monitoring. Comfortable owning features end-to-end from requirements and technical design to implementation, code reviews, and production support while collaborating in Agile teams to ship high-quality software.

## EDUCATION

### Master of Computer Science, UMass Dartmouth

Sep 2023 - May 2025

Relevant Coursework: Algorithms and its complexity, Advanced Machine Learning, Artificial Intelligence, Database design, Computer Networks, Paradigmatic Software Development, Computer Security

## SKILLS

<b>Programming Languages:</b>	Java, Python, C, SQL
<b>Backend Development:</b>	RESTful APIs, Microservices, OOP, MVC, API Integration
<b>Databases:</b>	PostgreSQL, MySQL, SQL Server, Schema Design, Indexing, Query Optimization
<b>Cloud &amp; DevOps:</b>	AWS(EC2, S3, IAM), Docker, CI/CD, Linux
<b>Testing &amp; Debugging</b>	Unit Testing, Integration Testing, Logging, Troubleshooting, Performance Tuning
<b>Tools &amp; Methodologies:</b>	Git, Agile, Code Reviews, Jira

## EXPERIENCE

### Data Engineer

Greenstand

July 2025 - Present

Remote, US

- Built Python services and automation jobs to ingest, validate and transform large datasets, improving reliability and reducing manual effort.
- Designed and optimized SQL queries and database structures to improve data access speed for downstream applications and reporting.
- Implemented robust error handling, logging and data quality checks to prevent pipelines failures and speed up debugging.
- Collaborated with cross-functional stakeholders to translate requirements into scalable, maintainable technical solution

### Software Engineer

LТИMindtree

May 2024 - June 2025

Remote, US

- Developed and maintained backend services and REST APIs in Java/Python for enterprise applications, following clean architecture and OOP principles.
- Implemented database-driven features using SQL, including schema updates, stored procedures/views, and performance tuning.
- Added API validation, authentication/authorization controls, and standardized error responses to improve security and reduce production issues.
- Wrote unit tests and supported CI/CD deployments; participated in Agile ceremonies, PR reviews, and sprint delivery.
- Investigated production incidents using logs and monitoring signals, performed root-cause analysis, and delivered permanent fixes to improve stability.

## Cloud Engineer

Mactores

Oct 2022 - Jul 2023

*Mumbai, India*

- Built automation scripts and backend utilities in Python to streamline operational workflows and reduce repetitive manual tasks.
- Supported AWS-based deployments (EC2, S3, IAM), improved environment configuration, and assisted with production troubleshooting.
- Worked with SQL databases to manage data persistence and reporting queries, improving query performance and correctness.
- Collaborated with engineering teams on system fixes and enhancements, contributing to testing, documentation, and release readiness.

## Software Engineer

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Jan 2021 - Sep 2022

*Hyderabad, India*

- Developed software modules and data-processing workflows to handle structured operational data for business reporting and internal applications.
- Automated recurring data workflows and integrations, reducing manual effort and improving consistency of outputs.
- Designed and optimized SQL queries and database objects to improve performance and support reliable data access.
- Improved maintainability by adding validation, exception handling, and logging, enabling faster debugging and fewer production defects.

## PROJECTS

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**Real-Time Vehicle Tracking System** Built a Python pipeline to process video frames and store tracking metadata in PostgreSQL; exposed results with REST APIs for downstream dashboards.

**Gross National Product** Developed a responsive React website with reusable components and routing; integrated from handling and deployed to production with version control.

**Property Management Web Application** Developed a CRUD-based backend with secure REST endpoints, input validation and Dockerized deployment for managing listings and pricing.

## CERTIFICATIONS

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- AWS Certified Solutions Architect - Associate
- AWS Certified DevOps Engineer

## LEADERSHIP

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- Led a innovation team as a Coordinator at Institute Innovation Council (IIC).
- Collaborated with the Police Commissionerate's Traffic Division on a real-time vehicle tracking project, aligning technical solutions with operational needs and supporting data-driven traffic management.