Devi Eswar Kumar Damerla

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Professional Summary

Software Engineer with 3+ years building scalable distributed systems and optimizing high-performance databases. Delivered 60-90% latency reductions across production microservices serving 200+ concurrent users, cut infrastructure costs by $160K+ through architectural improvements, and led zero-downtime migrations of 50M+ records. Expert in event-driven architectures, database optimization, and cloud infrastructure with strong fundamentals in algorithms and system design.

Professional Experience

Software Engineer Nov 2024 – Present
AI OWL *Columbus, OH*

- Architected and scaled distributed platform serving multiple facilities with microservices, relational and graph databases, reducing system latency by 60% and cutting operational analysis time by 90% through query optimization and automation.
- Built event-driven architecture processing 100K+ messages daily with auto-scaling services, lowering infrastructure costs by 40% and achieving 99.9% processing success rate.
- Accelerated database queries from 3+ minutes to seconds through strategic indexing and connection pooling while supporting hundreds of concurrent users.
- Enabled real-time event propagation across microservices for instant updates to concurrent clients while maintaining 99.9% availability.
- Deployed infrastructure as code and CI/CD pipelines for automated testing with zero-downtime deployments across dev/prod environments.
- Led technical design reviews and mentored engineers on distributed systems optimization.

Software Engineer Aug 2021 – Jul 2023
Airbus Group *Bengaluru, India*

- Scaled microservices platform serving 200+ engineers with 10K+ daily requests, achieving 90% API latency reduction through distributed caching and database optimization.
- Improved query performance by analyzing execution plans and implementing strategic indexing, accelerating execution from 3+ minutes to 60 seconds for queries handling millions of rows.
- Designed distributed caching layer improving performance by 75% and supporting 200+ concurrent users with 95% cache hit rate.
- Developed real-time streaming service cutting annual software costs by $120K (60% reduction) while improving reliability.
- Executed zero-downtime database migration of 50M+ records while maintaining consistency through automated testing.
- Established CI/CD pipelines with automated testing and code quality gates (85%+ coverage), reducing deployment time by 70%.

Education

Master of Engineering in Computer Science Aug 2023 – Apr 2025
University of Cincinnati, College of Engineering and Applied Science *Cincinnati, OH*
Bachelor of Technology in Computer Science and Engineering 2017 – 2021
Sagi Ramakrishnam Raju Engineering College *Andhra Pradesh, India*

Projects

Financial Document Intelligence System | *Python, PostgreSQL, Docker* Oct 2024 – Nov 2024

- **Hackathon Finalist** — Built scalable system processing 100K+ pages with hybrid retrieval, reducing analysis time by 90% (200+ hours to 2 hours).
- Designed asynchronous backend with optimized indexing and connection pooling for complex queries across millions of rows.
- Implemented concurrent ingestion pipeline achieving 5x throughput improvement through parallel processing.

Technical Skills

Languages: Python, JavaScript, TypeScript, Java, SQL, Go
Backend: Node.js, FastAPI, Flask, Django, Spring Boot, RESTful APIs, GraphQL, Microservices
Databases: PostgreSQL, MySQL, MongoDB, Redis, Neo4j, DynamoDB
Cloud & Tools: AWS (ECS, Lambda, S3, Aurora), Azure, Docker, Kubernetes, Terraform, CI/CD

Certifications

AWS Certified Solutions Architect – Associate
Deep Learning Specialization — DeepLearning.AI (Coursera)