Phani Davuluru

📱 *9791666126*
✉ *phanidavuluru98@gmail.com*
⌗ *killerFrost98*
LinkedIn: *phanidavuluru98*

Profile

Innovative software engineer with over 5 years of experience designing and delivering large-scale, high-performance systems. Skilled in leading cross-functional teams and developing robust scalable products that optimize costs, enhance user experiences, and support organizational objectives. Committed to product vision, I strive to leverage technology to create impactful solutions and drive meaningful progress.

Key Competencies

- Java
- Python
- JavaScript
- SQL
- MongoDB
- ElasticSearch
- AWS
- Kafka
- Redis
- Spring
- Angular
- Three JS

Experience

Jan 2023 – Present

Senior Software Engineer, *PeopleHum*

- Developed a robust **payroll reprocessing framework** to efficiently handle changes in paid pay runs while dynamically managing arrears, recoveries, tax recalculations, and statutory updates. This innovation reduced the resolution time of customer tickets by 400%, increasing efficiency and satisfaction.
- Led the end-to-end development of **payroll software** for India, UAE and Philippines to deliver a scalable, high-impact solution serving 10,000+ users in multiple locations.
- Implemented a high-performance **report generation framework** that syncs data from multiple sources, reducing data processing latency by 800% and reducing the delivery time of new reports by 100%.
- Engineered a robust **reimbursement system** that efficiently tracks claims and expenses, incorporating spend rules and user-configurable custom forms, reducing the average claim processing time by 60%.
- Architected **performance monitoring and logging framework** for APIs and schedulers with distributed tracking, ensuring system reliability through real-time anomaly detection, trend analysis, and near 100% accurate detection of performance bottlenecks in new deployments.

Jul 2020 – Dec 2022

Software Engineer, *PeopleHum*

- Developed and executed a comprehensive **SQL optimization** strategy focused on indexing, partitioning, and fragmentation, and selecting the right EC2 instance which resulted in a 600% improvement in query performance and a 25% reduction in memory usage.
- Designed and implemented a high-performance **analytics engine** using MongoDb, moving away from Elastic, achieving 400% faster performance using Kafka partitioning and multithreading to process data in near-real time along with anomaly detection, bias, and outlier analysis.
- Engineered optimized **UI deployment pipelines** with S3 static hosting, CloudFront, and component-based architecture, cutting build times by 300%. Developed a custom client-side caching and eviction mechanism using Angular annotations, improving next-page load times by 200%.
- Architected and built a scalable **Performance and Timesheet module** leveraging SQL indexing, partitioning, and query optimization to efficiently manage massive data volumes, supporting 100+ customers for over three years without performance issues.

Education

2016 – 2020 **Bachelor of Technology**, *Vellore Institute of Technology*, **Merit Scholarship**, CGPA: 8.44

2014 – 2016 **Intermediate**, *Narayana Junior College*, Percentage: 97

Personal Projects

stellar-pathways An accurate, to-scale model of our solar system utilizing the Runge-Kutta method for precise orbital calculations, featuring a realistic rocket launch simulation from Earth to Mars.

Spectra-luna A transformer-based classification model that analyzes spectral data, accurately classifies inputs, and highlights key spectral frequency bands.

Cogito A personal blog covering topics in engineering, science to space exploration.

GenAI chatbot A multi-agent Generative AI chatbot that handles general inquiries, personalized assistance, and real-time analytics RAG for knowledge retrieval and LangGraph for seamless multi-agent interaction.

Interests

Astronomy, Philosophy, Science Fiction Novels, Artificial Intelligence, Chess