Karmegam Vadivel

Sr. Software Engineer (Module Lead)

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Software Engineer with over 3 years of experience, proficient in Golang, Python, APIs, Microservice Development, and Networking. Recognized for my ability to independently manage projects and driving innovation, ensuring the delivery of high-quality, scalable solutions.

EXPERIENCE

Algomox Private Limited, Bengaluru, KA   November '22 - Present

Domain: AIOps Development

Software Engineer L1 - Software Development   - Nov '22 - Oct '23

Sr. Software Engineer L2 - Software Development - Sep '23 - Dec'24

Module Lead - Software Development   - Jan '25 - Present

- Developed and deployed microservice-based Golang applications, focusing on system-level improvements for data collection.
- Led development of Windows and Linux Patch Management platform using **Golang, WebSockets & NATS** messaging, streamlining the offline patching processes.
- Headed Kubernetes monitoring platform development using Golang, **AIOps**, Angular for high availability and performance analytics.
- Designed and implemented **Azure AD** to **On-Premises AD** integration using **Microsoft Graph API** and REST APIs, reducing manual intervention.
- Implemented proactive monitoring and alerting systems using **Prometheus** for early issue detection.
- Mentored junior developers through code reviews, fostering a collaborative and learning-focused environment to maintain code quality.
- Optimized Cassandra **database queries** and data storage processes to maintain faster responces between the Microservices. Reduced all **lazy Loading** and complex filterings.
- Played a key role in resolving critical production issues, ensuring high system availability and reducing downtime for a seamless user experience.

Skill Development Centre (RKMPTC), Chennai   July '20 - October '22

Domain: Technical Training & Application Development

Instructor - Technical Training & Application Development

- **Application Development & Training** : Delivered comprehensive training on low-code platforms (ZOHO Creator, ZOHO Sites), empowering students and professionals to create custom applications and build websites, fostering foundational understanding of the application development lifecycle.
- **Mentored students** in project-based learning, cultivating their problem-solving abilities, logical thinking, and technical acumen crucial for software development and technical leadership.
- Managed **server administration** and **network monitoring**, ensuring system performance and security for diverse training and development environments, demonstrating expertise in system infrastructure management.
- Developed and refined **technical curriculum** for ZOHO MDM, guiding users in mobile device and application management, showcasing understanding of system configuration and deployment strategies

SKILLS

- **Programming & Frameworks:** Go (REST APIs, Microservices, Concurrency, NATS, WebSockets), Python (FastAPI, Flask), AngularJS, JavaScript
- **Cloud & DevOps:** Azure, Docker, Kubernetes, Linux, Bash, CI/CD, Nginx, Prometheus
- **Networking:** Cisco CCNA (Completed 4 Modules, up to Scaling Networks), Routing, Switching IP Addressing, LAN/WAN Architecture
- **Databases:** RDBMS, SQL, Cassandra, Redis
- **Messaging & Streaming:** NATS, RabbitMQ, Kafka
- **Other Tools/Concepts:** Machine Learning, Graph APIs, Git, PowerShell

EDUCATION

Master of Computer Applications (MCA)   June '18 - May '20

Tamil Nadu Open University, Chennai

Bachelor of Computer Applications (BCA)   June '14 - April '17

Periyar University, SVMC, Uthangarai

Certifications / Achievements

- **Softlogic Academy -** Python Programming and Machine Learning
- **Cisco Networking Academy - CCNA R&S -** Introduction to Networks, Routing and Switching, Scaling Networks, Connecting Networks,

PERSONAL PROJECTS

- **Azure AD Integration with Microsoft Graph and REST APIs** - Golang
- **CreatorEdge Enhanced by Gemini AI** - Gemini API, AI, Advanced Analytics, Flutter
- **DesignFusion: AI-Driven Interior Design** - Gemini API, AI, 3D Visualization, Flutter