Deepakumar V U

Pune, MH ◦ +91 9403659628 ◦ deepakumarvu@gmail.com ◦ linkedin.com/in/deepakumar-v-u

Areas of Expertise

- Product Management
- Solution Architecture
- Security Review
- Mentoring
- Feature Engineering
- IoT

- Golang
- Python
- DynamoDB
- TimeStream DB
- Lambda
- SQS

- SES
- SNS
- API Gateway
- WAF
- Cloud Watch
- IoT Core

- AWS Private CA
- Docker
- Cloud Formation
- SAM
- SAR
- Jenkins

Work Experience

Senior Cloud Backend Engineer
Espressif Systems

January 2024 – Present
Pune, Maharashtra

Building Matter DAC Service, a managed PKI service for IoT Devices.

Tech Stack: Golang, AWS, Jenkins, Python, GitLab

- Leading various initiatives to enhance the product experience.
- Designing an in-house and highly flexible RBAC for Rainmaker and Other Espressif products.

Cloud Backend Engineer
Espressif Systems

July 2021 – December 2023
Pune, Maharashtra

Led the design and development of a scalable cloud-based PKI product, achieving rapid delivery within 8 weeks, and received recognition for excellence with the ESP-Champion-Club Award. Additionally, optimized serverless architectures, improved test coverage, and mentored junior team members while implementing significant cost and performance optimizations.

Tech Stack: Golang, AWS, Jenkins, Python, GitLab

- Lead the design and development of a **highly scalable cloud-based PKI** product and delivered the first iteration of the product within **8 weeks**.
- Received **ESP-Champion-Club Award** in Q3 2023 for the excellent work done as part of the DAC Pre-provisioning team.
- Designed and implemented numerous **highly scalable** and **cost-efficient** cloud **server-less architectures** with a wide range of AWS services. Features like group sharing, stats service, and time series DB for IoT nodes.
- Worked towards setting up scenario based **unit testing framework** and achieved a **+95%** test coverage for newly added code.
- Optimized services by introducing **concurrent processing** for polling and data processing functions with channels and semaphores.
- Introduced request batching to reduce request **execution time** by **20%** and **costs** by **30%**.
- Implemented various optimizations like **dependency management** to **eradicate** production build **errors**, dependency **vulnerability screening** and setup Gitlab pipeline for merge requests.
- **Mentored** junior team members.

Associate Cloud Engineer   December 2020 – June 2021

Espressif Systems   Pune, Maharashtra

Developed key features for RainMaker in Golang and resolved a critical privilege escalation vulnerability. Introduced tools to streamline team development.

Tech Stack: Golang, AWS

- Worked extensively in Golang to develop numerous **features** for RainMaker.
- Identified and promptly fixed a **platinum level** privilege escalation **vulnerability** in RainMaker.
- Discovered various tools for the team to ease the development.

Software Engineer   July 2019 – November 2020

UBS   Pune, Maharashtra

Streamlined risk simulation models using R and reduced debugging time by 80% with a custom error-logging package. Integrated DevOps with TeamCity and Puppet, cutting deployment time by 50% and issues by 90%.

Tech Stack: R, Oracle MySQL DB, Python, Teamcity, Puppet, Shell Scripting

Education

Pune Institute of Computer Technology   August 2015 – June 2019

B.E. Computer Engineering   Pune, Maharashtra

- **CGPA: 8.88/10.0**
- Coding and Financial lead of PICT Robotics 2018.
- **Project:** Automated Glaucoma detection using CNN, sponsored by National Institute of Ophthalmology (NIO).

Positions

Vice Chair   October 2023 – Present

Connectivity Standards Alliance   Pune, Maharashtra

- Acting as a Vice Chair of Security Design Tiger Team.
- Leading DA-PKI Revocation for Matter.

Certifications

AWS Certified Solutions Architect – Associate

Issued June 2022 - Expires June 2025