Sreelakshmi Suresh

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Profile Summary

★ Over 3 years of experience as a **Backend Developer** with in-depth knowledge in **Python, Golang,** and **Computer Networking**
★ Working Experience and Extensive knowledge in **Django** and **Django REST Framework**
★ Hands-on experience in **Computer Networking** using tools like iptables, IP rules, routes, and TC for managing network traffic and controlling bandwidth

Technical Skills

Programming Languages	Python, Golang
Frameworks	Django, Django REST Framework
Networking Tools	Traffic Control(TC), iptables, IP Rules, IP Routes, tcpdump, iperf
Machine Learning	Supervised & Unsupervised Learning, Neural Networks, Model Evaluation
RDBMS	PostgreSQL
IDE/Tools	VSCode, Git, Jupiter Notebook
Operating System	Linux

Professional Experience

QBurst Technologies Pvt Limited   **Sep 2021 – Present**

Backend Developer

★ Backend Developer with experience in web application development and computer networking.
★ Developed APIs and Functionalities for web applications using Python, Django, PostgreSQL, and GIT
★ Developed an application using Golang that manages network traffic and controls bandwidth using tools like iptables, IP rules, IP route, and TC.
★ Experienced in conducting peer reviews for code developed by fellow developers, providing feedback at both the functional and code level.

Education

APJ Abdul Kalam Technological University   **Aug 2017 – June 2021**

Bachelor of Technology in **Electronics and Communication Engineering** with **CGPA 9.0**

Projects

Network Traffic Management Tool

A comprehensive tool for managing network traffic and controlling the bandwidth of applications based on fingerprinting parameters such as source and destination IPs, ports, MAC addresses, etc.

Roles and Responsibilities

★ Gained expertise in network traffic management and bandwidth control.
★ Developed a file watcher using Go's filesystem notification library (**fsnotify**) to track file creation, modification, and deletion events.
★ Implemented scheduled tasks using the **cron** package in Go to execute functions at predefined intervals.
★ Hands-on experience with network traffic management tools such as **iptables**, **ip rules**, **ip route**, and **tc** for traffic shaping and bandwidth control.
★ Implemented the network traffic management tools using **Netlink.**
★ Engineered throughput control mechanisms leveraging fingerprinting parameters, including source IP, MAC address, and destination IP.
★ Implemented monitoring of network interface changes using **IP link monitoring** and **GoRoutine.**
★ Designed and implemented comprehensive unit tests to ensure code robustness and reliability.
★ Optimized and refactored code to improve efficiency, maintainability, and performance.
★ Diagnosed and resolved software bugs across multiple system components.

Testcase Management Tool

A comprehensive tool that is useful for end-to-end test case management, including web and desktop applications with extensive support for automated testing.

Roles and Responsibilities-

★ Developed multiple efficient RESTful APIs using **Django REST Framework**.
★ Designed and implemented **PostgreSQL** database schemas for Test Cases, Test Scenarios, Scenario Versions, and Scenario Execution to ensure data integrity and efficient querying.
★ Developed key features including Test Scenario management, Scenario Versioning, and Docker-based Automated Script Execution to enhance testing capabilities.
★ Managed storage of execution trace files in an **AWS S3** bucket.
★ Integrated **GIT** into our system to track the Gitlab tickets and test cases.
★ Developed a cron job to sync Gitlab to our system hourly.
★ Utilized **Celery** for asynchronous handling of the import operation of Excel sheets, optimizing performance and scalability.
★ Created and executed comprehensive unit tests using **pytest** to validate API functionality and code robustness.
★ Worked with the team to analyze the requirements, plan, and estimate various features.
★ Performed ongoing code optimization and refactoring to improve performance and maintainability, addressing and resolving bugs as they arose.
★ Conducted peer reviews for code developed by fellow developers, providing feedback at both the functional and code level.
★ Participated in sprint planning, retrospection, and daily standups.

Online Real Estate Platform

An innovative platform facilitating remote real estate auctions with live streaming and comprehensive integration for agents and buyers.

Roles and Responsibilities-

★ Developed and maintained RESTful APIs using Django REST Framework to support auctions, private sales, and authorities.
★ Designed and implemented dynamic email templates using Django's template rendering engine.
★ Configured **RabbitMQ** and **Supervisor** for managing asynchronous task queues and background process monitoring.

★ Integrated Facebook Live streaming functionality, enabling real-time auction broadcasts directly from the agency's Facebook page.
★ Managed the continuous upkeep of **DocuSign** eSignature integration, ensuring a seamless and secure workflow for document signing.
★ Provided support for application testing across various environments (QA, UAT, Production) and addressed issues during weekend auctions.
★ Managed the seamless delivery and deployment of code to production, ensuring a smooth and reliable transition for efficient software releases.
★ Engaged with clients to review and discuss software requirements and incorporated feedback from Trello tickets into development.

Certifications

★ Machine Learning Specialization by Andrew Ng on Coursera
★ Python Django - The Practical Guide, Udemy
★ Crash Course on Python by Google, Coursera
★ Learn Go for Beginners Crash Course (Golang), Udemy