
PROFILE

Passionate and detail-oriented Backend Developer with a two-year track record in developing robust solutions primarily in **Golang and Docker**. Enjoys creating efficient scripts and internal tools as a hobby developer in **Python and React**, demonstrating versatility and a knack for **learning new languages**. Skilled in coordinating team activities, **resembling a Scrum Master role**, and frequently providing **in-depth training** to Cisco TAC. Proactively contributes to continuous improvement with a strong foundation in both team leadership and technical expertise.

SKILLS

Golang | **Python** | **JS** | **Gin** | **FastAPI** | **ReactJS** | **MongoDB** | **ArangoDB** | **Redis** | **Kubernetes** | **Docker** | **Haproxy** | **Nginx**

WORK EXPERIENCE

Software Engineer II

Cloud & Data Center Products

Cisco Systems

Golang | **Docker****Dec 2022 – Current**

Nexus Dashboard Orchestrator - NDO

- Integrated the L4-L7 Service Graph feature of Cisco's APIC into the Orchestrator (NDO). Crafted a **simplified workflow** for L4-L7 services, streamlining the intricate configurations within NDO to ensure **enhanced efficiency** with minimal user input requirement.
- Managed two distinct **microservices** part of the NDO ecosystem. Engaged in rigorous validation of configurations and their subsequent conversion into the APIC Managed Object (MO) format, ensuring **seamless integration and compatibility**.
- Enhanced deployment dependency cycle detection using **Graph cycle algorithm**, added a solution that would require minimal code changes for objects which wish to take part in the cycle detection.
- Collaborated closely with various internal teams, swiftly **adapting to new codebases** from scratch and assimilating to new feature codebases. This agility ensured the **efficient integration** of multiple features, allowing for several to be launched simultaneously without compromising the release schedule.
- Actively scrubbed the existing codebase and identified a critical bug, a longstanding design flaw in one of the microservices that could **disrupt communication** in a multisite datacenter deployment, **potentially affecting thousands of configurations across a vast customer base** which would eventually impact on data center traffic flow.
- Developed a fix that not only **rectified database discrepancies** but also ensured NDO and APIC details remained in sync during subsequent upgrades. **This safeguarded a majority of affected customers** from potential data inconsistencies, ensuring a seamless user experience and negating the need for a challenging design overhaul.
- Played a key role** in helping reduce the bug count of the product release feature **close to 0** during crucial release phase.

Software Engineer I (Intern + FTE)

Cloud & Data Center

Cisco Systems

Python | **React** | **Docker****Jan 2021 - Nov 2022**

- Saved 300+ hours** a by providing a **web interface** for engineers which pushes the required server configurations for multiple servers concurrently using **multithreading**.
- Led a team** to design and build a **chatbot** that acts as a mini wiki for internal questions posted in Webex teams' group, by picking up questions and their thread by integrating with **Webex APIs** and storing the data, called 'CURI'.
- Developed **REST APIs** interacting with other microservices to deploy applications on **Kubernetes** using **CI/CD** pipelines to maintain and scale up the applications. Received multiple recognition for the innovation.
- Developed and implemented an innovative application, RAM (Resource Allocation Manager), which streamlined staffing management for managers and improved project automation tracking, resulting in a **40% reduction** in administrative tasks and **quicker** staffing allocation of resources by **60%**.
- Regularly gave KT to the larger teams of 150+ on the custom tools and scripts.

ADDITIONAL EXPERIENCE

FLIKRIFY: Golang, Haproxy, ArangoDB, RedisAvailable on : [Android](#) | [IOS](#) | [MacOS](#)

Lead Backend Dev

Designed and developed an application from scratch **with team of 2**, focused on simplifying the communication overhead in existing Social Communication Apps. Flikrify Focuses on community interaction with predefined channels compared 1:1 interaction. App is publicly available existing application stores. Utilized **Gen AI capabilities** to help build the application and release in timespan of 5 months.

EDUCATION

Mysore

JSS Science and Technology, University

August 2017-July 2021

• B.Tech in Electronics and Instrumentation, CGPA: 8.6

AWARDS & CSR

- **Bronze Stevie Award** - Recognized for Innovation in Business - Human Resources Management, Planning & Practice in the Computer Industries category for my design, contributions to the development and success of the Resource Allocation Manager (RAM) tool at the **Asia-Pacific** Stevie Awards April 2023.
- **IEEE Publication** - Published and presented paper at the **IEEE international conference** on PROGNOSIS DETECTION IN DEMENTIA: <https://ieeexplore.ieee.org/document/9641661>
- **CSR at Cisco** - Designed and developed web application to handle thousands of student registrations for a NGO partnered with Cisco. <https://edcreatefoundation.org/>
- **Instructor and Mentor (2018 – 2020)**: Taught 11th and 12th students in the NGO, MAKE A DIFFERENCE, and led the Mysore city team of instructors.

PROJECTS

Codeshift Tool | Cisco

React, Golang, Docker, Kubernetes, FastAPI

- A Continuous Delivery Platform for internal applications and make it customer ready for future use cases.
- Participated in **design thinking sessions** for the application development.
- Participated in **sprint planning**, creating user stories and their assignment.
- Developed Multiple Rest APIs to communicate with several **internal microservices** to deploy VMs, assignment of compute resources, assigning FQDN thus reducing the manual effort by 70%.

Kollect and Curi | Cisco

Microservice APIs, Python, MongoDB, Docker

- Designed a **Web-Application and Chatbot** for tracking and analyzing internal queries posted in teams group.
 - Led a team of 5 developers using **Agile methods** to deliver the proposed application.
 - Developed **REST APIs and integrated with Webhooks** to automatically pick up queries.
- The mini version of Reddit.

UCS config Tool | Cisco

React.js, Python, Docker, Kubernetes, FastAPI

- Proposed Automation solution for existing manual operations like:
- Configuring UCS (Unified computing server)- server name, default banner, timeout, adding new users, password and its expiration.
- Configuring DNS, NTP, SNMP, Device logs dump.
- Pitched in the idea to larger team and started working on it alongside another developer towards proposed solution.
- Packaged the scripts into one executable file with all the dependencies make it customer environment friendly and also developed a basic web interface to standardize inputs and format structure.
- Generated a report with standard company's format and then provided them to customer as part of Deliverable Document.

Telgram as Data Storage | Remote

- An application to automatically store unwanted/unsure data present in personal storage to a telegram chat as a personal backup. <https://github.com/umeshmg27/Telegram-as-Data-Storage>