VARSHA BHAT

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PROFESSIONAL SUMMARY: Software Engineer II with 5+ years of experience **building scalable backend systems**, **automating infrastructure**, and **delivering cost-saving cloud solutions**. Proven ability to **lead cross-functional efforts**, mitigate production incidents, and **redesign internal workflows**.

SKILLS: Java, Python, Bash, MongoDB, Microsoft Azure, Kubernetes, Nexus, SonarQube, Jenkins, Github, Web Applications, Oracle SQL Developer

EXPERIENCE

LUMEN TECHNOLOGIES

Software Developer II - Milpitas, CA, USA   **Jun 2023-Present**

- **Architected** and delivered a **cloud-based alternative** to **physical Customer Premise Equipment (CPEs)** using **Azure VMs** and **ARM templates**, enabling fully **automated infrastructure provisioning**.
  - o Collaborated with **5+ cross-functional teams** and external vendors to research and integrate networking components (**Virtual Machines, NICs, public IPs**), resulting in a production-grade solution with zero post-launch incidents and positive user feedback from clients for ease of use, along with **leadership recognition**.
  - o **Replaced manual hardware workflows** - procurement, configuration, and shipping - with **instant, cloud-based provisioning**, reducing delivery delays and **accelerating customer onboarding**.
- **Redesigned** legacy licensing system by leading migration to a **modern, automated model**, eliminating **2+ years of recurring issues** and **saving 30+ hours/week** across engineering.
  - o **Engineered automation pipelines** to handle **billing errors** and license recovery, **cutting operational costs by 25%** and **reducing daily support escalations by over 99%**.
- **Individually designed and deployed** a secure, **full-scale internal web application** (Python, Django) to **help 7+ support engineers** handle high-priority incidents faster on a **dedicated LINUX server**.
  - o **Exposed the app as a service** using **Nginx** and **Gunicorn**, integrating **authentication** and **automated restart daemons** to maintain high uptime and SLA adherence.
- Integrated **OIDC-based SSO** to **eliminate redundant dual logins** across internal/vendor portals, reducing login time by **1+ minute** and **user steps by 75%.**

Software Architect Intern - Los Angeles, CA, USA   **Jun 2022-Jun 2023**

- Supported **system architecture discussions** by addressing **integration challenges** and providing **technical inputs on vendor APIs** and deployment pipelines.
- Developed **REST APIs** for integrating and automating vendor products and services using **MongoDB, Java 11, and Spring Boot framework.**

Software Development Engineer - Bangalore, KA, India   **Jul 2019-May 2021**

- Drove **monolith-to-microservices** transformation by **engineering new APIs from the ground up**, enabling **modular deployments, horizontal scaling, and accelerated release cycles.**
- Built **REST APIs for 50+ federal and enterprise** telecom products using Java 11 and Spring Boot; implemented **secure data encryption** and **managed seamless DB integrations** via Oracle SQL Developer.
- **Designed and deployed file transfer APIs** and **infrastructure** from scratch, integrating **NAS storage, Oracle database, and Kubernetes persistent volumes** within a robust **CI/CD pipeline.**

INDIAN INSTITUTE OF SCIENCE (IISc)   Bengaluru, KA, India

Summer Intern   **Jun 2018-Aug 2018**

Developed a **real-time heart rate monitoring system** with a **webcam in MATLAB**, analyzing 300+ image frames to identify and **calculate the intensity of relevant pixels**, hence **reducing dependence on intrusive ECG.**

ACADEMIC PROJECTS

Smart Glove for the Visually Impaired   **Aug 2018-Apr 2019**

- Led a 4-member team to build a **smart glove that enabled object navigation** for the **visually impaired** in **indoor environments**. Tech Stack and Hardware: Raspberry PI with Python, **Intel Movidius NCS 2**, vibrational motors and camera, incorporating **NLP speech recognition and TensorFlow**.
- **IEEE Publication URL**: https://ieeexplore.ieee.org/document/8698009

EDUCATION

University of Southern California, Viterbi School of Engineering   **Los Angeles, CA, USA**
Degree: Master of Science, Electrical Engineering   **Aug 2021-May 2023**