Prem Kumar G

⊙ Bengaluru, India ✉ premkumarmvks@gmail.com ▯ +91 9538507538 ▣ in/premgowda98 ☁ portfolio.premgowda.in

SUMMARY

Software Engineer with 2.6 years of experience, specialising in Back-end development, DevOps, and AI. Proficient in utilising Docker for efficient deployments, implementing robust back-end systems. Recognised for my ability to independently manage complex projects and my dedication to driving innovation.

EXPERIENCE

Software Engineer | Insight Consultants | Bengaluru, KA | January 2023 - Present

- Spearheaded the development of a comprehensive **ID verification product**, integrating document verification, facial recognition, and bank statement analysis, resulting in a **60%** reduction in manual processing time and enhanced fraud detection.
- Architected and implemented the core backend using Python **FastAPI**, designed the database architecture with **MS SQL** and **MongoDB**, and led frontend development with Vue.js and Nuxt.js, showcasing full-stack expertise.
- Orchestrated the **DevOps** strategy, implementing a robust CI/CD pipeline using **Docker**, **Nginx**, **Linux**, **Ansible**, and **Azure DevOps**, while architecting and deploying resources on **Azure Cloud** platform for optimal scalability and security.
- Played a pivotal role in product launch and client acquisition, collaborating with the marketing team to secure two paying clients within the initial release phase, demonstrating strong technical and business acumen.
- Engineered an innovative **RAG** (Retrieval-Augmented Generation) model using **Langchain** and **LlamaIndex**, enabling leadership to extract actionable insights from employee surveys via **LLM-powered** chat.
- Developed the frontend for an internal organizational **LLM application** using Nuxt.js, creating an intuitive interface for accessing AI-driven insights.
- Contributed significantly to all stages of the product lifecycle, from initial system design and architecture to development, deployment, and client-facing activities, showcasing versatility and end-to-end **product ownership**.

Finance Engineer | Insight Consultants | Benagaluru, KA | March 2022 - January 2023

- Developed and implemented an **automated underwriting tool**, reducing loan verification time by **90%** and decreasing **First Payment Default (FPD)** rates from **25%** to **16%**, significantly improving efficiency and risk management.
- Engineered a comprehensive **data pipeline** integrating web scraping, database connectivity, and PDF processing with OCR technology to analyze bank statement transactions, streamlining the underwriting process and enhancing automated document processing.
- Created a **Machine Learning classification** model achieving **85%** accuracy for auto-segregating bank documents from other user-provided materials, substantially reducing manual verification time and improving overall process efficiency.
- Designed and developed **Power BI** dashboards and spearheaded automated reconciliation projects using **Python** and **UiPath**, providing real-time insights and improving accuracy in financial reporting for key stakeholders.
- Successfully delivered an **underwriting tool** that was subsequently acquired by the client for independent use, demonstrating the project's value and impact in real-world applications.

SKILLS

Back End: Python, FastAPI, Go (Novice), RDBMS, NoSQL, Redis
DevOps: Docker, Kubernetes, Linux, Bash CI/CD, Ansible, Azure, Nginx, Prometheus
AI/ML : Machine Learning, GenAI, RAG
Networking: DNS, TCP/IP, SSL, OSI Model
Front End: HTML, CSS, Vue.js, Nuxt.js

PROJECTS

Multi-purpose Home Server: From Ad Blocking to Kubernetes Cluster | March 24

- Architected and implemented a comprehensive home network infrastructure utilizing **Raspberry Pi**, showcasing proficiency in **network design**, Linux administration, and IoT integration.
- Deployed **Pi-hole** for network-wide ad blocking and **DNS** management, demonstrating expertise in network security, DNS protocols, and improving overall browsing experience and network performance.
- Implemented **MotionEye OS** for a CCTV surveillance system, exhibiting skills in video streaming, motion detection algorithms, and secure remote monitoring.
- Established a personal Kubernetes cluster for containerized application deployment, leveraging **Twingate** and **Cloudflare tunnels** for secure remote access, showcasing advanced knowledge in container orchestration, **zero-trust networking**, and cloud-native technologies.

Personal Finance and Tech Blogs Aggregator | December 23 | premgowda.azurewebsites.net/
· Built a custom personal finance tracking and analysis website, and a tech blog aggregator with API integration skills.
· Integrated Gemini LLM for blog summarization in order to enhance content consumption efficiency.

Streak Stalker Bot | October 23 | github.com/onyx185/streak-stalker-bot
· Created a Python-based Discord bot for a coding challenge management system, securing 3rd place in a competition.
· Integrated daily notifications and scheduled input collection, enhancing user engagement and overall project functionality.

CERTIFICATIONS

· **RabbitMQ Essentials Certification by CloudAMQP**: Gained comprehensive knowledge of message **queuing** systems, focusing on RabbitMQ architecture, patterns, and best practices for building scalable and reliable distributed systems.
· **Redis | RU101: Introduction to Redis Data Structures**: Mastered advanced **Redis** data structures and modeling techniques, enhancing skills in efficient data storage and retrieval for high-performance applications.
· **Neo4j Graph Fundamentals Certification**: Acquired expertise in graph database concepts, **Cypher** query language, and data modeling for complex, interconnected datasets. Developed skills in leveraging graph algorithms for efficient data analysis and problem-solving.
· **Microsoft Certified: Azure Data Scientist Associate (DP-100)**: Mastered the design and implementation of end-to-end data science solutions using **Azure Machine Learning** and associated Azure services. Demonstrated proficiency in data preparation, feature engineering, model training, deployment, and MLOps practices.

EDUCATION

Bachelor of Mechanical Engineering | Global Academy of Technology | Bengaluru, KA | 2019 | 8.3