# VAISAKH KUSABHADRAN Milpitas**, CA** 95035

# **805-295-0865**

# SOFTWARE ENGINEER **vaisakh.kbhadran@gmail.com**

**WORK EXPERIENCE**

**Flipt LLC Software Engineer Apr 2022 - Dec 2023**

* Developed **Flask** based **REST API** components that adjudicates claims for pharmacy benefit management by pre-processing the requests (parsing, validating in **Pydantic** and acknowledging through **RabbitMQ**) in **Python**, andreviewing based on patient information extracted from **Couchbase** DBand  **Amazon Redshift.**
* Created **Apache Airflow** pipelines that process around **50K** records of PHI data daily by extracting from **SFTP** transferred files, transforming using Python, **NoSQL** scripts and loading into **AWS S3** through DAGs.
* Implemented **asynchronous** modules in Python for optimizing database calls and http requests along with **pagination** in data upserts which reduced the service response time by **27% and improved** CPU usage **by 14%.**
* Worked on Python packages including **PyCryptodome** for PHI data encryption, **Pandas, numpy** for efficient claim accumulation calculations, **Pytest** for incorporating unit tests and monitoring tools **Datadog** and **Splunk.**

**Alpine Electronics Python Developer Feb 2022 - Apr 2022**

* Implemented advanced image processing techniques in **OpenCV** and **Mediapipe** to preprocess input data, resulting in improved feature extraction and reduced noise in tracking boosting the model accuracy by **9%.**
* Automated the process of integrating pre-processed images into a **RestNet** model fine-tuning workflow from AWS S3 bucket, leading to a **12%** reduction in model training time without compromising model accuracy.
* Diversified training data by applying **data augmentation** techniques like random rotation, translations and flips thereby improving the model’s ability to generalize unseen gaze patterns and environmental conditions.

**Iqvia, Bangalore, India Sr.Software Engineer Feb 2019 - Aug 2019**

* Employed Python scripts coupled with **SQL** queries to efficiently transform medical sales data stored in **MySQL** DB into delimited file formats causing a **40%** reduction in time required for generating client specific reports.
* Collaborated with the code migration team to develop Python scripts that interface with MySQL DB to replace DB2 loads by **Mainframe JCL** procedures which improved scalability and increased data loading speed by **25%.**
* Engaged in all SDLC phases of drug sales reporting project including design, development and implementation.
* Collaborated with DevOps teams to establish continuous integration pipelines, automating testing, deployment, and monitoring processes for the SaaS application.

**Wipro, Bangalore, India Software Engineer Jun 2015 - Feb 2019**

* Revamped daily health check activities including server readiness assessment, quote creation, critical job failure alert reports and ticket assignments by creating Python modules which saved **1** **hour** per day for the team.
* Achieved **40% increase** in data retrieval speed by optimizing **DB2** queries using **JCL**, **COBOL**, **DB2** and **Rexx** which led to reduction in daily and monthly batch processing duration by **40%** and **30%** respectively.

**EDUCATION**

**MS in Computer Science** San Francisco State University, California Dec 2021, GPA 3.73

**B.Tech in Computer Science** Amrita University, India May 2015

**SKILLS**

**Languages**  Python, Java, C, C++, MATLAB, Prolog

**Web application**  HTML, CSS, Flask, Gunicorn

**Database** MySQL, PostgreSQL, Microsoft SQL Server, Couchbase, Redshift, Alembic

**Miscellaneous**  Github, JIRA, Docker, Kubernetes, Linux, Agile, SFTP, Airflow, pip