# VAISAKH KUSABHADRAN 805-295-0865

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4+ years of experience in development, testing and deployment of scalable applications using microservice architecture across diverse domains like insurance, healthcare and pharmacy benefit management.

**EXPERIENCE**

**Flipt**, Jersey City, NJ - **Software Engineer**  **Apr 2022 - Dec 2023**

Backend developer responsible for development and maintenance of claim adjudication and pharmacy benefit management systems.

* Developed **REST** endpoints in **Flask** that handles ~2K requests for automated treatment authorization using Python and RabbitMQ **reducing manual intervention from 2 hours to 10 minutes.**
* Implemented asynchronous modules in Python for optimizing database calls and http requests which **reduced service response time by** **27% and improved CPU usage by 14%.**
* **Improved average claim settlement time duration by 30%** through substitution of SQL joins with Pandas for data comparison and the utilization of NumPy for payment calculations.
* Collaborated with DevOps teams to establish CI/CD pipelines, containerization and orchestration strategies using Docker and Kubernetes, **accelerating release cadence from monthly to biweekly.**
* Substituted Python scripts with **ETL pipeline** to load insurance coverage data from NoSQL database (Couchbase) to AWS S3 and Redshift, **eliminating the need for manual intervention entirely.**

**Alpine Electronics**, SJ, CA - **ML Engineer**  **Feb 2022 - Apr 2022**

Member of machine learning team responsible for improving the model's ability to generalize unseen gaze patterns and environmental conditions.

* Enhanced feature extraction using multiple image processing techniques in OpenCV like histogram equalization and image segmentation, **boosting the model accuracy by 9%.**

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

Contributor to the system migration team involved in transitioning legacy Mainframe code to Python scripts.

* Transformed medical sales data in MySQL DB to delimited files by incorporating SQL queries into Python scripts, resulting in a **40% reduction in client specific report generation time.**
* Migrated JCL procedures to Python MySQL DB scripts which **increased data loading speed by 25%.**

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

Built Mainframe/Python applications for client engagement teams within the life insurance industry.

* Revamped health check activities including server readiness assessment, 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 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, IndiaMay 2015

**SKILLS**

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

**Technologies** AWS,Docker, Kubernetes, RabbitMQ, Airflow

**Web technologies**  HTML, CSS, Flask, Gunicorn

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

**Miscellaneous**  Github, Jira, Linux, Agile methodologies, SSH, pip