

Harikrishna S Pillai . Jarvis Consulting

A software enthusiast who is passionate about developing applications. During my academic years, I developed several projects using technologies like Flutter, Firebase, and Google APIs. Thereafter, pursuing a career in software became my prime focus. Recently, I started working at Jarvis as a Data Engineer. At Jarvis, our team used the Agile methodology which helped me align with industry-standard SDLC. Moreover, I was able to put my time-management, problem-solving and organizational skills to work by developing applications. Implementation of these applications helped me become proficient in technologies like Java, Linux/Shell, GIT, RDBMS(SQL), Maven, Docker, and JDBC. I aspire to deliver world-class applications along with pursuing my passion for learning new technologies.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git/GitHub, IntelliJ, Docker

Competent: Python, Flutter/Dart, Objective C, Firebase, Assembly Language

Familiar: HTML/CSS, MATLAB, JavaScript, Android Studio, Node.js

Jarvis Projects

Project source code: https://github.com/jarviscanada/jarvis_data_eng_HarikrishnaSPillai

Linux Cluster Resource Monitoring App [GitHub]: Developed a monitoring agent using Bash scripts that keep an active track of resource usage statistics of a node in a network. Postgres container mounted on a Docker engine is used as a Database. SQL queries were used for data analysis which also includes an error detection query to check if crontab is updating values on a timely basis. The Bash Scripts are automated using crontab. The agent was run in a CentOS 7 virtual machine on the Google Cloud Platform.

Core Java Apps [GitHub]:

- **Twitter CRD App:** Developed a CLI tool that allows users to send, get, and delete tweets to and from Twitter using REST API. MVC (Model-View-Controller) design pattern is used to manage the code structure. The Rest APIs interact with Twitter, Maven, and Spring as dependency managers. The application was deployed using Docker Components and then the image was uploaded to Docker Hub. JUnit and Mockito was used for unit testing.
- **JDBC App:** Worked on a Java application using JDBC API to connect to a PostgreSQL database. The app allows users to perform CRUD operations and is built using the DAO (Data Access Object) pattern. Maven is used as Project Management Tool.
- **Grep App:** Reimplemented the popular LINUX grep command as a Java App. The application recursively searches through a given directory for a supplied Regex pattern. The matched lines are then written in a text file. The application was improvised by Java 8 features Lambda and Stream API. Streams and Lambda helped in reducing memory usage and inducing a declarative programming approach. IntelliJ was used as IDE and the project was built using Maven. The app is deployed on DockerHub using Docker.

Python Data Analytics [GitHub]: Employed a mock OLAP using docker and provisioning an image of PostgreSQL database. The retail sales data of our client (LGS) was loaded into this database to carry out complex queries. For communication purposes a network was setup between PostgreSQL and Jupyter notebook container. The retail data was analyzed in Python using Jupyter notebooks. Used REPL client to explore the data. Pandas library was used for manipulation and visualizations. RFM (Recency, Frequency & Monetary) Segmentation was integrated in the notebook to help determine the budgeting and marketing strategies based on different categories of customers.

Highlighted Projects

Real-Time Parking Detection System: Designed and Developed a Parking Detection system in a Raspberry Pi and Intel Neural Compute Stick. The system used Yolo v3 Real-time Object detection algorithm to process images supplied by Pi cam. The number of parking spots was conveyed from Raspberry Pi to Firebase using Python and Web API. The data received in real-time was broadcast to the client-side web application. The web app was developed using Flutter and Dart programming language. Additionally, the web app used google authentication API and Map API for authentication and GUI purposes.

Portfolio Website: Developed a Responsive Portfolio website using tech HTML/CSS and Bootstrap. The project is developed with the help of several open source libraries. MoveTo Js for smooth scrolling, MailToUI Js library for a convenient UI section in ContactMe. The website is hosted using AWS services like S3 and route 53. www.analysthari.com

Professional Experiences

Software Developer, Jarvis (2020-present): Exercised Scrum framework for team collaboration and SDLC. Developed several applications using technologies such as Docker, Bash scripting, Java, RDBMS(SQL), Project management using Maven, and using Git/GitHub. Utilized Gitflow as the branching model in order to perform a collaborated development approach. Also, I was able to enhance my soft skills like problem-solving, critical thinking, and teamwork.

Product Analyst, BSC Global (2020-2021): Delivered quality reports on a biweekly basis using MS Excel and Power BI to stakeholders to showcase the improvements made by the department. Prepared an informative dashboard for the logistics department which increased productivity by approximately 10 percent. Improvised the current SOP which increased the productivity by 25 percent with almost similar or decreased human effort. Test and Diagnose products with proper documentation to help organize inventory.

Education

Centennial College (2018-2020), Post Graduate Diploma, Electronics Engineering - GPA: 3.5/4

Miscellaneous

- SQL- SQL for Data Analytics and Business Intelligence
- Reading Non-Fictional Books
- Building Projects using Raspberry Pi