

# Santhosh Srinivasagan . Jarvis Consulting

Working as a robotics programmer and having an electrical engineering background has prepared me to have a mindset of being open to learning any number of tools or technologies to solve a problem. At Jarvis, I developed skills in Java, Python, Git, SQL, Bash, Maven, and Docker while participating in various challenging projects using an Agile/Scrum framework. Throughout my professional career, I have enjoyed debugging and solving complex problems, and I aim to work in an environment that demands an innovative approach to problem-solving. After realizing how satisfying it is to solve technical problems, I decided to switch my career to data engineering. Over the next few years, I would go on to teach myself data structures, algorithms, and programming through various courses and projects.

## Skills

**Proficient:** Python, RDBMS/SQL, Java, Linux/Bash, Agile/Scrum, Git

**Competent:** Data Modelling, Jupyter Notebook, Docker, .NET framework, Matlab, Data structures and algorithms

**Familiar:** Raspberry pi, GCP, PostgreSQL, Swift, Android studio

## Jarvis Projects

Project source code: [https://github.com/jarviscanada/jarvis\\_data\\_eng\\_SanthoshSrinivasagan](https://github.com/jarviscanada/jarvis_data_eng_SanthoshSrinivasagan)

**Cluster Monitor** [GitHub]: The Jarvis Linux Cluster Monitoring Agent manages a linux cluster of servers running CentOS 7. Developed Bash scripts that gather data on hardware information and usage of hardware on all servers in the cluster and store it to a PostgreSQL database. The database is implemented as a Docker container. This allows the user to compare results and analyze the effective utilization of hardware resources.

**Python Data Analytics** [GitHub]: Developed a proof-of-concept project to help an online gift store analyze their sales data and find effective marketing strategies. For this project, we used Jupyter, a Python notebook, to perform our analyses. A PostgreSQL data warehouse was used to store client retail data. Using Pandas, NumPy, and Matplotlib, we manipulate the dataset and display the results. By using RFM market research, we were able to segment customers so that the store could develop marketing campaigns targeting both old and new customers.

**Core Java Apps** [GitHub]:

- **Grep App:** Created the Java Grep Application which is an implementation of the Linux Grep command which search for a string of characters in a given directory and outputs them to another file. The application was created using Java Lambda/Stream API's with Apache Maven and deployed using Docker
- **JDBC App:** Constructed the JDBC application using java JDBC API to perform CRUD operations using DAO and DTO design patterns on a PostgreSQL retail store's database.

## Highlighted Projects

**Student Management System** [GitHub]: A Java console application for managing students information. The user can access, create, and edit the information of a student in this application and store it in a local database. Student information's are stored in a text file, including an 8-digit student ID, the student's first name, last name, the program name, courses, GPA and tuition

## Professional Experiences

**Junior Software Developer, Jarvis (2022-present):** Worked as a Data Engineer in an Agile/Scrum environment to develop and implement solutions to various problems within the Jarvis team as well as small businesses within the community. The projects were implemented using Git/GitHub, Docker, Bash Scripts, CentOS 7, PostgreSQL, Python, Java SE 8, Apache Maven, Apache Tomcat, JDBC API, and cloud platform.

**Robotics programmer, Linamar corporation (2021-2022):** Analyzing and troubleshooting PLC program. Proven ability to work in a team environment. Writing SQL queries for storing and extracting parts information. Programming ABB & Fanuc Robots. Programming Allen Bradley suite of PLC and HMI. Debugging and patching existing programs.

## Education

**SRM university (2015-2019)**, Bachelor of Engineering, Electronics and Instrumentation Engineering - Won gold medal for presentation on IoT integration for TRMS control systems

**Conestoga College (2020-2021)**, Post graduate certificate, Robotics and Industrial automation - GPA: 3.89/4.0

## Miscellaneous

- Matlab and Octave by edX (2017)
- Linkedin learning Java (2022)
- Linkedin learning Python (2022)