# Tharuni Iranjan . Jarvis Consulting

I have a strong passion for problem-solving and enjoy taking on challenging tasks. My ability to adapt and grow within an ever-changing environment is a valuable asset. I hold an undergraduate degree in Computer Science and have gained a wealth of experience working at Jarvis and other co-op positions, which honed my analytical and Java development skills. My exposure to an agile work environment has also equipped me with the ability to effectively manage my time and communicate and collaborate with team members. I am eager to leverage my acquired skills and make a meaningful impact in the industry. During my spare time, I enjoy playing board games, and leisure skating, which has taught me the value of perseverance.

## Skills

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

**Competent:** Docker, Google Cloud Platform, Python, Multithreading, JavaScript

**Familiar:** C, C++, Machine Learning (TensorFlow), Web Application Development (Vue.js), REST APIs, R

## Jarvis Projects

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

**Cluster Monitor** [GitHub]: This project aims to assist the Jarvis Linux Cluster Administration (LCA) team in managing a Linux cluster of 10 nodes/servers running CentOS 7. The project utilizes Linux command lines, Bash scripts, PostgreSQL, Docker, and Git to implement a Minimum Viable Product (MVP). Users can write SQL queries to extract real-time resource usage data, facilitating future resource planning. The project includes a psql instance for data persistence, a bash_agent with two scripts (host_info.sh and host_usage.sh) for data collection, and Docker for database provisioning. The source code is managed on GitHub, and cron is used for scheduling the agent scripts.

## Highlighted Projects

**Learning Leaf - Web Application** [GitHub]: This full stack website was developed during COVID-19 and was created with the intent of enhancing the online learning experience. Users can access this website through different account types and are shown their corresponding dashboard. For instance, a professor can see the stats of a lecture based on student ratings. This application was coded using JavaScript, alongside the frontend framework Vue.js. Firebase services were utilized for the backend, including: authentication, cloud functions like sending event-based email notifications, and Firestore for a real time database.

**Auction Simulator - Software Quality Assurance** [GitHub]: Mimics an online auctioning application that allows users to login as a particular user type, and perform actions depending on their set of permissions (i.e. bid/auction/delete users/etc).Python was used for the Backend, along with Pytest for testing. C++ was used for the Frontend and a Makefile to execute the code. The project was divided into 6 phases: requirements gathering, UML design and white box testing, coding,unit/branch/system testing, deployment and acceptance testing, maintenance and regression testing. Requirements changed according to customer needs.

**Whisper - Java Application** [GitHub]: An online chat server that allows multiple users to login into a group chat and see previous messages, and any new messages are sent to all online users in real time. This application was created used Java and Javafx for the GUI and includes a database to store information, and server sockets for people to communicate with each other.

**ProdClass - Machine Learning** [GitHub]: A research study on the ability to automatically classify product features into positive and negative affiliations using a product review data set. The purpose of this project is to utilize customer reviews to allow companies to improve their products and subsequently increase customer purchasing. Natural Language Processing (NLP) techniques including sentiment analysis and text modelling was utilized to complete the task. Code was developed on Google Collab using Tensorflow and other Python libraries like scikit-learn and Pandas.

## Professional Experiences

**Software Developer, Jarvis (2024-present)**: Developed and managed databases using SQL and Bash scripts, and programmed in Java and Python to analyze data and improve current processes. Employed excellent time management and communication skills to effectively complete tasks and convey progress during scrum meetings.

**Applications Analyst, Osler, Hoskin, and Harcourt LLP (2022)**: Managed various lawyer processes by designing, developing, deploying, and unit testing custom scripts in PowerShell and SQL, increasing overall efficiency.

**Data Analyst, City of Brampton (2022)**: Utilized excellent analytical skills in order to manage, clean, manipulate data to discover trends and demonstrate them using data visualizations to improve data readability.

**Teaching Assistant, Ontario Tech University (2021)**: Provided technical support to students on programming assignments and projects, including debugging code, explaining software design patterns and algorithms, and troubleshooting technical issues, increasing academic success.

## Education

**Ontario Tech University (2018-2023)**, Bachelor of Science (Honours), Computer Science - Major Entrance Scholarship (2018) - Dean's List (2020, 2023) - President's List (2020) - GPA: 3.45/4.30

## Miscellaneous

- Career Essentials in Software Development by Microsoft and LinkedIn (2023)
- Physical Activity: running/skating
- Entertainment: board games/video games
- Home Improvement