Aishwarya Parackal . Jarvis Consulting

I am a new graduate with a masters in Electrical and Computer Engineering. My previous experience was as a research assistant at the University of Toronto. I am passionate about learning new technologies and enjoys programming in C, C++, Java, Python, SQL, Linux, and Verilog. Software Engineering allows exploring my interests along with analyzing data to answer some of the difficult questions or to make critical decisions which might be considered tedious and challenging. However, the fact that it can aid to change life for better excites me the most about Software Engineering. I am a highly motivated, productive and focused team player with a strong communication, interpersonal, organizational, analytical and problem-solving skills: a good listener, hard worker, and avid learner. Moreover, I like to enjoy music, Bharatnatyam, badminton and table-tennis as hobbies.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, Debugging, IntelliJ, Maven, Spring framework, Spring

Competent: JUnit, Mockito, docker, REST API, jdbcTemplate, Datasource

Familiar: Python, C++, Verilog, PCB Debugging, FPGA

Development Projects

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

- **Cluster Monitor**: Implemented a Cluster Monitor Agent that allows users to monitors nodes connected in a Linux cluster by tracking and recording resources usage in realtime to an RDBMS Database. Coded using a bash script and SQL, docker usage for PostgreSQL execution, holding a database with recorded data, crontab set up to record usage data every minute.
- **Core Java Apps**: Implemented Java-based apps and managed using maven - The Twitter app allows to post, show and delete tweets. Implemented using spring framework for class dependencies management, twitter REST API, Http client libraries, JSON serialization/deserialization and tested with JUnit and Mockito. JDBC app that establishes a connection between java application and RDBMS for SQL execution. Its implementation included DAO and Repository design pattern. Grep app that searches and outputs a text pattern in a given directory recursively. Coded using regex, Java I/O, lambda and stream APIs.
- **SpringBoot App**: An online stock trading application using REST API, capable of executing market orders, creating traders, their accounts and quotes using tickers. A microservice implementation using SpringBoot. PostgreSQL used for data storage. The application implemented using Datasource, jdbcTemplate, IEX cloud, docker and tested with JUnit and Mockito.
- **Cloud & DevOps**: Not started
- **Hadoop**: In-progress
- **Spark/Scala**: Not started

Professional Experiences

Data Engineer, Jarvis, Toronto (2020-Present): Working as a junior developer, and have implemented java based applications, worked on RDBMS, java I/O libraries, Http Client libraries, spring framework. Experience in working with IDE (IntelliJ), debugging, Javadoc, testing (using JUnit and Mockito). Experiences with Agile practices such as team collaboration through daily scrum notes and scrum stand-ups among the team members. Planning for the next sprint is carried out during a Sprint retro and planning meeting with team members and scrum master. Also, regular code review for feature, develop, release and master development branches is done by the senior developer.

Education & Academic Projects

University of Toronto (2017-2019), Master of Engineering, Electrical and Computer Engineering

- **Design and Fabrication of GaN Transistor:** Worked on GaN Technology. Involved in research experiments and analysis of data to implement an optimized process flow. Its documentation using XperiDesk tool was an important aspect to collaborate with the team and other researchers in the world.
- **Lane-detection:** Worked on VLSI technology to design and implement a chip that could aid in lane detection. Its design involved MATLAB coding, Verilog implementation and layout planning. Experience in problem-solving, team collaboration, presentation and time-management.

Mumbai University (2013-2017), Bachelor of Engineering, Electronics Engineering

- **3-D Printer:** Designed and implemented 3D-Printer in team collaboration. The project was build using compact disk drives, and a microcontroller controlled its movements. Implemented g-code and c language for mechanical movements and switching control. Experience with problem-solving, time management and presentation.

Certificates & Awards & Activities

- President, Electronics Engineering Student Association (2015-16): Departmental event organization.