Nidhi Zala . Jarvis Consulting

As a recent graduate from Lakehead University, having completed my Masters in Computer Science in January 2023, I bring a positive and organized approach to managing multiple priorities, while also showing a zeal to take on additional responsibilities for reaching team goals. While studying at Lakehead, I have gained expertise in various areas such as performance Algorithm design, compilers and operating systems, computational intelligence, Artificial Intelligence, and machine learning, to name a few. Throughout my academic journey, I have worked on a multifarious range of projects, related to Database management systems, the Internet of Things, embedded systems, data modeling and visualization, data visualization and web development using languages like C, C++, Java, Python, MERN stack, and much more.Having previously worked as a Research and Development Engineer at MTEM in India, I have honed my technical skills and problem-solving abilities, always striving to contribute to the firm's growth. Currently, I am working at Jarvis to further improve my developer skills and work on challenging projects using new technologies such as Docker, Hadoop, Sprigboot, Maven, REST API, and RDBMS, among others. I believe that being consistent, taking responsibility for one?s actions, and being diligent in all that I do, are crucial traits that help me become a better version of myself every day.

Skills

Proficient: Java, Python, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, SQL, MERN stack development, IoT, Google Cloud Platform GCP

Competent: Embedded Coding, Data analysis and Visualization, Django, Flask, Docker

Familiar: R, AWS, PowerBI, .Net, Data Mining

Jarvis Projects

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

Linux Cluster Monitor [GitHub]: This system enables users to monitor the machine specifications and usage data of multiple Linux systems. The monitoring agent gathers information on the hardware of each machine using Bash scripts and stores it in a PostgreSQL database that is provisioned with Docker. Resource utilization data is collected automatically using Crontab and can be analyzed using SQL queries. The tool was tested on a virtual machine running the CentOS7 distribution of Linux on the Google Cloud Platform, and every script was meticulously checked to ensure that it met all the requirements.

Highlighted Projects

Mind Machine Interface: This project is an aid for disabled people. It helps the person to control objects using their brain sensing. Observing the movements in the signals and coding on the sensors, MATLAB helped to achieve the expected outcomes.PHASE one was Controlling a single device with contraction and relaxation of neurons in hand.PHASE two was Controlling devices in the house with brain signals produced, helped especially for the disabled.

ChatterBox the Realtime Chat Applicatioj: Real-time chat application with features like chatting, screen sharing, Audio call, Video call, and much more with a great user interface and smooth transitions throughout the webpage. The project was based on the MERN stack (Mongo DB, Express.js, React.js, Node.js) so that it is easily extendable and up to date

Smart Toll Plaza: It is a user-friendly application/wallet where the user can add the money to the wallet. With this wallet and embedded chip, the person just passes by the toll Plazas with an automatic deduction of tax, without waiting in lines for the same.

Smart Trash Collector: This project is utilized for Locating 80% of Bins in the city and sending alerts to the corporation based on harmful Gases released from bins and the level of bin filled. It is a GPS-inclusive app for the trash collection van to locate maximum bins position and replace the on-time.

Smart Irrigation: An Embedded system along with the Android application for remotely maintaining switches in the farm and monitoring crops along with alerts if any issues. Furthermore, added a feature for turning on and off the system remotely.

Smart Parking: It is an Embedded systems project to automate the 75% of the ease of parking.A hardware project made with the help of multifarious sensors to guide a person to an empty parking space along with guiding to efficiently park the vehicle and save parking space.

Professional Experiences

Software Developer, Jarvis (2023-present): I have been involved in multiple projects that necessitated the utilization of various technologies such as Linux, Bash, Docker, Postgres, Java, and Spring Boot. In each project, I adopted the Scrum/Agile methodology, along with Git and Git Flow.

Research and Development Engineer, (MTEM) Make the Ends Meet (2019-2021): I have been working on multifarious projects, based on the embedded systems designed. The tasks included designing projects based on the embedded product requirements, using Internet of things techniques for hardware development followed by web development using various software and languages like C, C++, Java, Python, and front-end technologies.

Education

Lakehead University (2021-2023), Master in Computer Science, Computer Engineering - Scholarship - Dean's List (2015, 2016): Ut enim ad minim veniam - GPA: 3.8/4.0

XYZ university (2016-2018), Master of Engineering, Electrical and Computer Engineering

Miscellaneous

- Udacity Machine Learning (2019)
- Winner
- Basketball player
- Competitive gaming
- Volunteer, ABC Food bank: Ut enim ad minim veniam