

Nisarg Khandhar . Jarvis Consulting

Passionate and innovative tech enthusiast with a strong machine learning and analytical background and a deep curiosity for hidden patterns and insights in data. Committed to continuous learning and collaborative problem-solving.

Skills

Proficient: Machine Learning (Anaconda & Jupyter Notebook), Neural Networks Modelling, Python, RDBMS/SQL, Agile/Scrum, Git

Competent: Linux/Bash, Java, Android Studio, Selenium (QA), Swift Xcode

Familiar: C#, .Net, Javascript, Web development, JIRA/Bitbucket

Jarvis Projects

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

Cluster Monitor [GitHub]: In our cluster monitoring project, we embarked on a comprehensive journey to streamline the process of monitoring hardware and usage specifications within a Google Cloud environment. Our project began with the creation of a dedicated Google Cloud instance, equipped with a Linux CentOS operating system. To facilitate remote access and management, we integrated VNC Viewer into our setup. To kickstart our development process, we leveraged IntelliJ Studio, a powerful integrated development environment, and downloaded it onto our instance. This served as the foundation for our coding efforts. Our collaboration and version control efforts were centered around a GitHub repository at `git@github.com:jarviscanada/jarvis_data_eng_NisargKhandhar.git`. Within this repository, we meticulously organized our work across three branches. **Feature Branch** This branch became the home for all code-related activities, where we collectively added and fine-tuned various features. **Develop Branch** Here, we curated the main changes and refinements to our codebase, ensuring that it was stable and met our project's core requirements. **Master Branch** Our master branch served as the pinnacle of our project, housing the most polished and production-ready code. As part of our data management strategy, we employed Docker and PostgreSQL to create a robust database capable of storing extensive hardware and usage specification data. This infrastructure laid the groundwork for our data-driven monitoring system. To gather essential hardware and usage specifications, we ingeniously integrated bash scripts into IntelliJ Studio. These scripts allowed us to collect crucial data from the cluster environment seamlessly. One of the standout features of our project was our implementation of crontab. This tool enabled us to fetch real-time data at scheduled intervals, ensuring that our monitoring system provided up-to-the-minute insights into the cluster's health and performance. To ensure the project's transparency and accessibility, we diligently uploaded the entire codebase, along with relevant documentation, to our GitHub repository. This not only facilitated seamless collaboration but also showcased our commitment to open-source principles. In summary, our cluster monitoring project was a testament to our skills in cloud computing, database management, coding, and project collaboration. It underscored our ability to create a robust monitoring solution within a cloud environment and showcased our commitment to best practices in software development and version control.

Highlighted Projects

Jogging Buddy [GitHub]: Collaborated with team member to create an app using Swift based application using Xcode 14.0 with the Firestone firebase functionality to go for a run and calculate the heart rate and run statistics.

Meet & Greet App [GitHub]: Created app in XCode using Swift, that helps hosting and finding meetups and gatherings. Used Firebase authentication for storing data.

Professional Experiences

Software Developer, Jarvis (September 2023-present): During our training program, we will have the opportunity to work on a diverse range of projects spanning various domains and technologies. These projects will encompass the following key areas **Java Development** We will delve into Java development projects, where we will design and implement Java applications, leveraging the language's robust features and capabilities. These projects may involve creating desktop applications, web applications, or backend services. **Python Projects** Python will be another focal point of our training, and we will work on projects that harness Python's versatility. This may include data analysis and manipulation, web development using frameworks like Django or Flask, or even machine learning and artificial intelligence applications. **Linux-Based Projects** As Linux plays a pivotal role in modern software development and system administration, we will undertake projects related to Linux. This may involve tasks such as system configuration, shell scripting, server

management, or even the development of Linux-based applications. Core Java Projects Building a strong foundation in Core Java is essential. We will engage in projects specifically focused on Core Java concepts, which form the bedrock of Java development. This may include projects related to object-oriented programming, multithreading, data structures, and algorithms. Throughout our training, we will gain hands-on experience, acquire valuable skills, and develop a well-rounded understanding of these technologies. These diverse projects will not only enhance our technical proficiency but also prepare us for a wide range of opportunities in the ever-evolving field of software development.

Machine Learning Intern, Royal Bank of Canada (January 2022- December 2022): In the work term, we undertook the development of a sophisticated Deep Machine Learning Model using a Sequential approach, tailored specifically for RBC application. Our journey involved several key stages and areas of expertise AI Algorithm Implementation Our project centered on the core principles of machine learning, where we harnessed the power of AI algorithms capable of learning from data and making predictive assessments. These algorithms served as the cornerstone of our predictive modeling efforts. Data Quality Verification and Normalization Ensuring the integrity and quality of our data was paramount. We conducted meticulous data quality checks and applied normalization techniques to ensure that the data was suitable for modeling. Machine Learning Testing Rigorous testing is essential in the development of machine learning models. We utilized TensorFlow, a leading machine learning framework, to construct our neural network model. This step involved extensive experimentation and fine-tuning to optimize model performance. Collaboration with Engineering Recognizing the importance of a holistic approach, we collaborated closely with the engineering team. Together, we explored the development of secondary data sources, delving into factors such as lead time, cost, and alternative data streams to enhance our model's robustness and reliability. Feature Engineering To boost the accuracy and overall performance of our machine learning models, we engaged in feature engineering. This process involved crafting and engineering feature sets that played a pivotal role in our data analytics initiatives. Data Preprocessing Data preprocessing is a critical step in the machine learning pipeline. We meticulously prepared and transformed our data to ensure it was well-suited for training and testing purposes. Our project encapsulated the essence of data-driven decision-making, where we harnessed the power of AI and machine learning to develop a cutting-edge model. This model not only exhibited the capability to make accurate predictions but also demonstrated our dedication to data quality, collaborative efforts with engineering, and the importance of feature engineering in advancing data analytics initiatives

Education

Sheridan College (2019-2022), Bachelor of Applied Computer Science, Mobile & Cloud Computing - Scholarship - Dean's List (2015, 2016): Ut enim ad minim veniam - GPA: 3.2/4.0

St. Kabir School (2001-2018), High School, Mathematics, Science - Scholarship - Dean's List (2015, 2016): Ut enim ad minim veniam - GPA: 3.2/4.0

Miscellaneous

- Udacity Machine Learning (2019)
- Winner
- Basketball player
- VolleyBall player (State Level-Captain)
- Volunteer, JGM EVENTS: Hosted a cricket tournament with 10 teams