Siddarth Krishnan . Jarvis Consulting

I'm a recent computer science graduate passionate about machine learning and advances in the crypto space like decentralized finance. My excitement stems from seeing how we can identify patterns in big data set with the use of deep learning and different neural network architectures. In addition, I've been paying close attention to the proliferation of decentralized protocols in blockchain technology and how creative developers have gamified finance with Web3. There are many challenges I find interesting here like incentivizing liquidity providers. I would enjoy gaining experience with time series analysis and working with large data sets.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Microsoft Office

Competent: Python, C++, Smalltalk, Docker, Javascript

Familiar: PyTorch, React, Vue, MATLAB, Rust

Jarvis Projects

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

Cluster Monitor [GitHub]: Set up monitoring scripts for a linux cluster to track usage statistics for several nodes. These nodes are connected locally and the script will periodically populate a table with each node's current usage information. This project helped get acquainted with the linux filesystem hierarchy. It was apparent that virutal memory comprises process info, memory, CPU scheduling and other statistics. Logging memory statistics was a good exercise in understanding file paritions, which manage the storage space.

Core Java Apps [GitHub]:

- Twitter App: In the process of making CRUD app for Twitter to learn APIs.
- JDBC App: Used JDBC to access database from the RDBMS to abstract CRUD operations. Used the data access object (DAO) pattern in code to execute SQL statements. The DAO pattern along with java.sql api were used in implementation to perfrom operations on an existing database. Our DAO classes hides how objects are persisted in the database. I also explored another the repository pattern and its advantages in this small project.
- Grep App: Implemented the bash grep function in a java application. This app made use of java regex classes and file handling to test its usage for text files.

Highlighted Projects

Machine learning object recognition assignment: Goal was to deploy machine learning model (neural network architecture) to identify objects by a class label. We wanted to understand why deep learning was preferable for computer vision tasks.Used transfer learning approach, adapting a prefined CNN for our dataset. We had a hard time achieving classification lower than standard benchmarks for the R-CNN models. We could have focused more on preprocessing data and adjusting the network through drop layers. We also should have read more literature on networks for image classification as we were unable to correct overfitting and accuracy issues in the given time.

Professional Experiences

Junior Software Developer, Jarvis (2021-present): Gaining experiecne with many development tools and programming paradigms. Implemented a linux cluster monitoring agent to track node usage on a local network.

Cast Member, Cineplex (2021-present): Guest services role. Worked in concession area serving food and preparing orders. Checked vaccine certificates for all theatre entrants. Closing and opening duties.

Education

Ryerson University (2018-2021), Bachelor of Science, Computer Science - GPA: 3.3/4

Miscellaneous

- Receational sports
- Defi research

- Trading