Faizan Ali . Jarvis Consulting

My passion for Computer Science started at a very early age when I would spend days figuring out how specific components/software on my computer work. My early interest in the inner working of computers soon developed into a passion that pushed me to learn more about Computer Science.

To pursue my passion and interest in Computer Science, I graduated with a Bachelor of Science(Honours) in Computer Science from the University of Ontario Institute of Technology(UOIT) in 2019. I then got a Post Grad Certificate in AI Analysis, Design, and Implementation from Durham College in 2021. My education helped develop my theoretical and practical skills in various aspects of computer science such as Software Development, Data Science, and Artificial Intelligence.

While pursuing my Post Grad certificate, I got the opportunity to work as a Research Associate/developer at the AI Hub. At this job I got the chance to learn from and work alongside some of the top professionals in the industry using my skills in computer science/software development to research and develop easy to maintain, AI and Computer Vision-based software according to client requirements.

My education and experiences have led me to become someone very passionate about Computer Science and always on the lookout to enhance my skills by learning more about it.

Skills

Proficient: Java, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git/GitHub

Competent: Data Science, Docker, C++, Python, Artificial Intelligence(Deep Learning), OpenCV/Numpy/Pandas, Tensorflow

Familiar: HTML, CSS, JavaScript, Cloud Computing, Android Development

Jarvis Projects

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

Cluster Monitor [GitHub]: Developed a monitoring agent program using Bash scripts for Linux OS. This program collects hardware specification and resource usage data for the system and then stores it into a relational database. The database to store the information was created using PostgreSQL and deployed locally using a Docker image for Linux.

- Host Info script: Collect hardware specifications and inserts them into the appropriate table
- Usage Infor script: Collect server usage data and insert it into the appropriate table. This script is executed every minute using Linux crontab to allow us to get data at regular intervals on usage.

Core Java Apps [GitHub]:

- JDBC App: Java application that creates a connection to a Postgresql database for employee information using JDBC. It allows you to easily perform all CRUD operations on the database from the application.
- Grep App: This program allows you to have linux grep functionality in any OS. It allows user to search for a regex pattern in all files in a given directory and its subdirectories, outputting all matching lines into a txt file.

Highlighted Projects

Deep Learning - Picture Analysis [GitHub]:

- Created an android application to send picture data from an android device to a windows application over a wireless network.
- Programmed a Convolutional Neural Network (CNN) model to detect objects in pictures using Python and the Keras library with an accuracy of about 85 percent.
- Implemented Java based solution to allow two-way communication between the Android application and the windows application.

Parallel Path finding algorithm [GitHub]: Find the best path between 2 cities using the genetic algorithm.

- Created very similar parallel versions of a genetic algorithm in Java and C++ using Java and POSIX threads to find the shortest path between a list of cities based on how far apart each city was from each other.
- Analyzed the two implementations to compare performance of the algorithm implemented in different languages.

Professional Experiences

Software Developer, Jarvis (2022-present):

- Develop, test, and maintain scalable, high quality software based on requirements
- Collaborate with other developers,and product owner using the Agile software development approach to create high quality applications

Reaserch Associate/developer, The AI Hub - Durham College (November 2020 - February 2022):

- Developed easy to maintain, AI and Computer Vision based software used to perform eye tracking with a webcam in collaboration with the front-end team.
- Analyze and Annotate data required to develop Deep Learning based models for multiple projects.
- Designed and developed a Deep Learning model to perform object detection on 25+ objects
- Perform Accuracy tests on Deep Learning models to verify the model meets the standards
- Collaborate with the front-end team to Deploy Deep Learning models to cloud.
- Utilize strong communication skills to interact with the client and determine the requirements for the AI based software solution they require.

Education

University of Ontario Institute of Technology(UOIT) (2014-2019), Bachelor of Sciences (Honours), Computer Science

Durham College (2020-2021), Graduate Certificate, AI Analysis, Design and Implementation - GPA: 4.66/5.0

Miscellaneous

- Playing and watching Cricket
- Playing PC Video Games