Armaan Nanji

Toronto, Ontario

Education

University of Toronto

September 2022 - Present

Honours Bachelor of Science in Computer Science and Economics

• Academics: Cumulative GPA of 4.0/4.0; Dean's List Scholar (3.5+ cGPA); In-Course University of Toronto Scholar (Top 300 undergraduate students by cGPA)

McMaster University (Transferred Out)

September 2021 – August 2022

Honours Bachelor of Applied Science in Computer Science

• Academics: Cumulative GPA of 12.0/12.0; Dean's Honour Roll (9.5+ cGPA); Provost's Honour Roll (12.0 cGPA); Faculty of Engineering Award of Excellence (Admission average of 95%+)

Relevant Coursework

- Data Structures & Algo. • Theory of Computation
- Software Design
- Multivariable Calc.
- Stats & Data Analysis
- Systems Programming
- Intro. to Databases • Computer Organization

Projects

Traffic Sign Localization and Classification | Keras, Pandas, NumPy, Next.js, Flask

- Used Keras to implement a neural network to classify street signs and predict their bounding boxes
- Preprocessed over 10,000 images, which improved accuracy by 4% and reduced training time by a factor of 4
- Was able to reduce the problems associated with exploding/vanishing gradients by using the ELU activation function, He initialization, and batch normalization, which improved IoU by 4.9% on the test set
- Created an web app using Next. is and Flask that allows users to evaluate their own images using the final model

Medical Service Request App | Java Swing, JUnit, OpenCSV, Requests

- Developed an application that allows users to request medical services be delivered to their house
- Adhered strictly to "Clean Architecture", integrating SOLID principles and design patterns throughout the project, which resulted in maintainable and easy to understand code
- Utilized mapping APIs to generate time estimates and directions for the delivery of services
- Used JUnit to perform integration, unit and end-to-end testing, achieving over 80% coverage across the entire program

Exploratory Data Analysis of NBA Statistics | R Markdown, ggplot2, modelr, dplyr, tidyr, tibble

- Wrote a report concerning the evolution of three point shooting in the NBA using R Markdown
- Preprocessed and cleaned a gigabyte of NBA shot log, game and player data using tibble and dplyr
- Used ggplot2 to create visualizations such as histograms, scatter plots, line graphs and spatial data visualizations
- Performed statistical analysis on the collected data using modelr and standard statistics packages, proposed plausible explanations for the patterns identified, and related points of interest to events happening at the time

Experience

VIA Rail Canada

Administrative Assistant

May 2023 - August 2023

Toronto, Ontario

- Managed an archive of over 1,000 documents within VIA Rail's real estate department
- Organised over 50 outbound work orders issued by VIA Rail Canada through the creation of spreadsheets
- Travelled to over 15 VIA Rail stations and created reports regarding the security features in each establishment

Technical Skills

Languages: Python, Java, C/C++, R, HTML, CSS, JavaScript, Typescript, SQL Developer Tools: VS Code, PyCharm, IntelliJ, Visual Studio, RStudio, Git/GitHub

Technologies/Frameworks: Next.js, ggplot2, NumPy, Pandas, MatplotLib, scikit-learn, Keras, TensorFlow