

Skills

Languages: Python, SQL, R, C++11, C, Java

ML Tools: NumPy, Tensorflow, Keras, Pandas, Databricks, Apache Spark

Other Tools: Azure, Power BI, Git, Linux/bash, Jira

Experience

Gore Mutual Insurance • Data Scientist

May 2021 – Aug 2021

- Delivered **6** descriptive and historical reports for performance management, auditing and operational tracking in collaboration with the analytics team, effectively providing value to the stakeholders.
- Automated the **E2E** delivery of market insights to the managers, featuring Competitive Pricing Index, Loss Ratio and other metrics. Successfully, eliminated **week-long** process of raw data analysis.
- Utilised **SQL** for database queries, **Python - pandas** for **ETL** in **Databricks** and **Power BI** to create reports. Moreover, built data pipelines in **Azure** with **SQL** from **VLDBs**, followed by creating visual metrics in **Power BI** with **Dax**.

Atlas365 Inc. • Frontend Developer

Jul 2020 – Sep 2020

- Improved the UI design of **5** components in an Angular website (in Typescript) using CSS.

Game Pill • Python Developer

On-Call

- Created **3** Social Media bots in **Python** with **Selenium** along with a GUI using **Tkinter**.

Research

Inholland University • Research Assistant

Jan 2022 - present

- Researching Smart Horticulture using **Machine Learning** at Inholland University – Delft, Netherlands with the intention of publishing as a second author.

LiTrans Lab – Ryerson University • Research Assistant

Aug 2019 – Sep 2019

- Enhanced the photorealism of a VR simulation to improve reaction accuracy of the experiment's subjects.

Projects

CNN From Scratch • Neural Net 

- Built a CNN with b2b convolutional layers, pooling layers and fully connected using **NumPy** only.
- Trained and achieved **90%** success rate on odd MNIST.

ANN From Scratch • Neural Net 

- Built a fully connected ANN using **NumPy** only achieving **96%** accuracy on MNIST within **10** epochs.

MNIST ANN/CIFAR-10 ANN, CNN • Neural Net 

- Built multiple ANNs and CNNs using **Tensorflow** and **Keras**. Achieved **97%** on MNIST with ANN. Achieved, **53%** and **70%** on CIFAR-10 with ANN and CNN respectively.

ChessAI • Chess Engine 

- Implemented a Chess engine in JavaScript using a Minimax Algorithm enhanced with AlphaBeta pruning.

Education

University of Waterloo • Bachelor of Computer Science

2020 – 2025

Cumulative GPA : 91% ; Relevant Courses : Calculus III, Probability, Linear Algebra