Rushil Patel

Machine Learning/Deep Learning Enthusiast **·** ra8patel@uwaterloo.ca **·** ra8patel.github.io/me

Education

**University of Waterloo** Waterloo, ON

BASc. Honours Computer Engineering September 2018 –April 2023

* Relevant Coursework: Discrete Math & Logic, Linear Algebra, Calculus

Experience

**Economical Insurance** Waterloo, ON

*IT Access Security Analyst* January 2019 – April 2019

* Utilized MySQL to query internal employee records to isolate error prone processes in data entry
* Implemented a process improvement in daily access reporting by investigating errors within IBM Mainframe and IBM DB2 (Database)
* Increased personal identity access awareness for over 200 internal employees as a company security ambassador through online security campaigning
* Terminated over 150+ redundant IDs with overlapping access, essential for security role design
* Effectively presented project findings to various teams within the company in order to prepare for implementation of new database system

**City of Brampton** Brampton, ON

*Recreational Co-ordinator* September 2016 – January 2017

* Contributed to helping youth develop qualities such as teamwork through organized sports
* Organized drills to help youth further develop skill in various sports
* Increased personal communication skills by executing different strategies to help individuals of different skill levels

Projects

**World Life Expectancy, Data Visualization**

*Python, Pandas, MatplotLib, Seaborn*

* Utilized Pandas and MatplotLib Library to create different graphs displaying the change in life expectancy of different nations over time
* Currently experimenting with different functionality of data visualization tools in order to expand skills to different areas such as NLP processing and computer vision

**Predicting Titanic Survival, Binary Classification**

*Python, Tensorflow, Keras, Pandas, MatplotLib,*

* Utilized Keras API to create a deep learning binary classification model which predicts an individual’s survival rate based on various labels
* Cleaned the data using one-hot encoding method to convert categorical data into numerical data in order to be processed within the deep learning model as vectors
* Implemented EarlyStopping callback in order to monitor the model’s validation accuracy and interrupt training if accuracy begins to decrease after designated number of epochs

**Predicting House Prices, Regression**

*Python, sci-kit learn*

* Developed a linear regression model to predict house prices utilizing scikit-learn library
* Currently working on expanding knowledge of mathematics for data analysis through coursework and online resources

Key Skills

**Programming**: Python, C++, SQL, HTML, JavaScript, Java, Android Studio

**Machine Learning/Data Analysis**: Tensorflow, Keras, sci-kit Learn, Pandas, Numpy