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

January 2019 – April 2019

IT Access Security Analyst

- 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