Karandeep Ahluwalia

EDUCATION

Binghamton University, State University Of New York

Bachelors of Science in Mathematics, Minor in Computer Science

Graduated: May 2019

Harpur's College Dean's List Spring 2018

Stuyvesant High School

Graduated: 2015

TECHNICAL SKILLS

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

Technologies: Spyder, Netbeans, Unity, Atom, Jupyter, TensorFlow, NumPy, Pandas, Scikit-Learn

Relevant Coursework: Data Structures & Algorithms, Introduction to Statistical Learning, Probability Theory, Computer

Systems and Architecture, Programming with Objects, Linear Algebra, Topology, Real Analysis

PROFESSIONAL EXPERIENCE

Data Science Intern

Live In Bing, Binghamton, NY

May 2018 - Aug 2018

- Coordinated with small team to build a Python based neural network deployed via Android app predicting real estate prices based on property features
- Created and optimized 2 different neural networks using TensorFlow and Scikit-Learn yielding in a 5% percent increase in accuracy from original model
- Delivered comprehensive biweekly presentations updating coworkers on individual progress in improving Neural Network

Assistant Teacher

Binghamton Center for Technology, Binghamton, NY

May 2017 - Aug 2017

- Responsible for assisting 10 high schoolers in learning the basics of Unity on a weekly basis to spread interest in technology
- Clarified confusing topics by providing clear examples of the various modelling techniques and explaining each step thoroughly
- Collaborated with teachers and provided ideas in setting up weekly lesson plans to best engage young students

PROJECTS

Tic Tac Toe Machine Learning Bot

- Developed a bot in Python that records best move probability based on previous game outcomes
- Compactly saves decision tree in a pickle file after each game so it continues to improve each session
- Refactored to optimize how quickly it can learn from its past

Kaggle Machine Learning Final Project

- Employed and combined several feature selection methods and machine learning models given a 40,000 feature training dataset to have the most accuracy on the test data
- Final Model built by stacking several previous successful models and achieved 70% accuracy (Highest accuracy was 72%)

LEADERSHIP POSITIONS

Binghamton University Data Science and Analytics Club

Programming Vice President

- Design tutorials exploring different aspects of data science and analytics for many groups of varying experience in the field
- Schedule and devise meeting agenda with other board members for informing general student body of the power of data science in new and exciting ways
- Present to different student organizations introductions to several programming languages and modeling techniques

D-1 Binghamton Ultimate Frisbee Team

Captain

- Manage \$30,000 budget to ensure the most opportunity for both the men's team and women's team
- Organize practices and drills for over 80 players every weekday with 2 co-captains
- Develop and implement team strategy to competitively place in Northeast.