Bin Jang

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EDUCATION

CORNELL UNIVERSITY
BS in Physics and
Information Science
Expected May 2023 | Ithaca, NY
College of Arts and Sciences

Cum. GPA: 3.74 / 4.3

KOREAN MINJOK LEADERSHIP ACADEMY
Grad. Feb 2017 | Hoengseong, Korea

SKILLS

PROGRAMMING LANGUAGES
Over 5000 lines:
Java • Python
Over 3000 lines:
HTML • CSS • R
Familiar:
PHP • SQL • Matlab

FAMILIAR FRAMEWORKS
NumPy • Pandas • Seaborn
Scikit-Learn • Matplotlib

COURSEWORK

INFORMATION SCIENCE
Python
OO Programming & Data Structures
Data Science
Data Mining and Machine Learning
Design and Programming for the Web

PHYSICS
Introductory Physics Sequence (Honors)
(Mechanics, E&M, Waves, S. Relativity)
Classical Mechanics
Advanced E&M
Quantum Mechanics
Linear Algebra
Differential Equations
Multivariable Calculus

LINKS
Github:
https://github.com/binjang
LinkedIn:
https://www.linkedin.com/in/bin-jang-14b977148/

EXPERIENCE

MACHINE LEARNING | Bitcoin Tweet Sentiment Analysis
Spring 2022 | Ithaca, NY
- Conducted sentiment analysis on Bitcoin Tweets dataset using Textblob library.
- Developed models that predicts percent change in bitcoin price using decision tree and knn regressor models in scikit-learn.
- Optimized R-squared values for each model using the optimal k / tree depth values.

PERSONAL PROJECT | Cryptocurrency Trading Bot Development
Spring 2022 | Ithaca, NY
- Developed a cryptocurrency trading bot that buys and sells four different cryptocurrencies and sends Slack messages when a transaction is made.
- Collects and analyzed past market data using Upbit API (Korean Crypto Exchange) and yahoo finanace API.
- Developed trading strategies based on Volatility breakout strategy and other quantitative trading strategies.
- Developed a strategy that has 18% MDD 2.7 HPR for the past year, and deployed the bot to AWS cloud server.

WEB DEVELOPMENT | Climate Reality Western NY Chapter
Fall 2021 | Ithaca, NY
- Worked on a group project to develop the organizational website for Climate Reality Western NY Chapter.
- Coded in HTML / CSS / JS (jQuery) to build a static website, working under an actual client and the organization guideline.

DATA SCIENCE | League of Legends Gameplay Data Analysis
Spring 2021 | Ithaca, NY
- Created a user dataset by collecting top-players' gameplay data using Beautifulsoup and Riot Games Developer API.
- Conducted qualitative data analysis on top rank user's data to identify commonalities among them and their difference from lower-tier players.
- Identified critical features from the dataset using correlation analysis and built a logistic regression model that predicts the winning team, with a r-squared score of 0.98.

AWARDS
- 2021 & 2020 Fall College of Arts and Sciences Dean's List
- 2021 Google Kickstart Round G : 2714th
- 2021 Google Kickstart Round F : 4192nd
- 2021 Google Kickstart Round D : 4776th
- 2021 Facebook Hacker Cup : Round 2 (2826th)
- 2020 Freshman Writing Seminar Adelphic Award : Nomination
- 2016 Korea Young Physicists' Tournament (KYPT) : Grand Prize