Jason Chongkyung Kim

Substitution Structure | Substitution | Substituti

Education

Swarthmore College

Computer Science and Statistics

Aug. 2018 - May 2022

- **GPA**: 3.61/4.0
- Major GPA: 3.91/4.0
- Relevant Coursework: Data Structures and Algorithms, Software Engineering, Artificial Intelligence, Discrete Mathematics, Probability, Linear Algebra, Multivariable Calculus
- Skills: Python, pandas, C/C++, SQL, JavaScript, HTML/CSS/Bootstrap, Javascript, R, Stata, Jupyter Notebook, Git, VS Code, Atom, APIs, Google Analytics

Coding Projects

Manchester United Diagnosis: What is the problem? (ongoing) | Python, Jupyter Notebook, Kaggle

- Analysis of Manchester United data in order to diagnose the club's downfall since 2013.
- Retrieve data from Wikipedia using pandas to study Manchester United's average league position from 2009.
- Extract and visualize FIFA ratings across Premier League's top teams over the past five years

Twitter Sentiment Analysis Engine | Python

- A **natural language processing** project that uses **TextBlob** for detecting **polarity**, on top of pulling **Twitter API** using **tweepy**.
- · Set up data pipeline to retrieve data from Twitter
- Developed a Twitter Sentiment Analysis Engine that studies tweets' polarity based on keywords
- Out of 10 keyword inputs, detects keyword with highest polarity score.

Experience

Software Engineering Intern

FinePrint Data

Machine Learning Research Assistant

Swarthmore College Statistics Department (Steve Wang Lab)

Feb 2021 – Present Philadelphia, Pennsylvania May 2020 – Present

Swarthmore, Pennsylvania

- Studied and parsed the North Atlantic Right Whale Consortium (NARWC) dataset pertaining to whale sightings to study individual whales' survival rates.
- ullet Built parallelized algorithm in R using our logistic model to estimate the survival probability of every whale in the dataset.
- Ran a logistic regression model to discern significant variables that meaningfully affect a whale's survival rate.
- Cleaned dataset of 70,000+ entries, manually going through observations to remedy errors and report the issues to NARWC.
- Reported data findings to the Swarthmore math department of 10+ professors and 30+ students. Paper to be finalized and published by October 2020.

Data Science InternAugust – Nov 2020LotusFlareSunnyvale, California

- Developed **Python** script using Jira's **REST API** to automate Jira issues' due date notification emails to LotusFlare employees.
- Build algorithms with **Python** and **R**, using **pandas** on **Jupyter Notebook** and working with Jira's **REST API**, to analyze Jira time-series data to improve product delivery efficiencies.
- Coordinate with product managers and the data science team to understand existing management behavior, to suggest best practices, and to highlight potential risks.
- Report data analysis results in bi-weekly meetings to 30+ engineers and product managers, visualizing the results with **Plotly**.

Economics Research Intern

May – August 2019

Swarthmore College

Swarthmore, Pennsylvania

Debugged Stata codebase that analyzes US banks dataset of millions of observations and hundreds of variables