# Jason Chongkyung Kim

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#### 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.
- Compare average 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

Data Analyst Jan 2021 – Present

Swarthmore College Basketball Team

Swarthmore, Pennsylvania

• Analyze Swarthmore Division III basketball team's performances over the past five years to devise winning patterns and strategies with the coaches.

#### **Statistics Research Assistant**

May 2020 – Present

Swarthmore, Pennsylvania

Swarthmore College Statistics Department (Steve Wang Lab)

- Studied and parsed the North Atlantic Right Whale Consortium (NARWC) dataset pertaining to whale sightings to study individual whales' survival rates.
- 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.

<u>Data Science Intern</u>
<u>LotusFlare</u>

August – Nov 2020

Sunnyvale, 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