

Tyler Kei

516-406-9831 | tylerkei2004@gmail.com | [linkedin.com/in/tyler-kei](https://www.linkedin.com/in/tyler-kei) | github.com/tylerkei9

EDUCATION

Purdue University

Bachelor of Science in Data Science and Applied Statistics

West Lafayette, IN

Aug. 2022 – May 2026

New Hyde Park Memorial High School

High School Diploma

New Hyde Park, NY

Sept. 2018 – June 2022

EXPERIENCE

agRPA Corporate Partner

Purdue Data Mine

Aug. 2024 – Present

West Lafayette, IN

- Used QGIS and Python to analyze weed data, generate flight paths, and create shapefiles for drone navigation
- Automated the process of converting TIFF files to shapefiles using QGIS's built-in Python capabilities
- Enhanced flight plans and pesticide application, resulting in less environmental impact and reduced costs for farmers
- Integrated outputs from a YOLO-based AI model to identify weeds, crops, and backgrounds, improving the accuracy of pesticide prescriptions

PROJECTS

TF-IDF Analysis of Law and Biology Texts | *Python, NLTK, pandas, sklearn*

Sept. 2024 – Sept. 2024

- Used the NLTK package to clean text from law and biology books, including tokenization, lemmatization, stemming, and stop word removal, resulting in DataFrames with over 20,000 data points
- Conducted an inner join on DataFrames to find common terms and applied TF-IDF analysis to evaluate word significance, using line charts to show the progression of TF-IDF values of common words over the course of the documents
- Incorporated bigram TF-IDF analysis for better context around important word pairs

Spotify Song Recommendation System | *Python, sklearn*

Aug. 2024 – Oct. 2024

- Cleaned and normalized an open-source Spotify database, addressing inconsistencies and refining data quality
- Applied an unsupervised machine learning technique, specifically K-means clustering, to analyze and group songs based on their audio features
- Assigned users to these groups to provide tailored song suggestions that matched their tastes

Fixed Income Trading Screen | *MS Power App*

May 2024 – July 2024

- Assisted the investment team of Mutual of Omaha to prototype a fixed income trading screen using MS Power App integrated with SharePoint
- Prototype was upscaled into production environment and used as trading tool

VolleyStudies | *R, Python, BeautifulSoup4*

Oct. 2023 – Dec. 2023

- Developed a web scraper to collect volleyball game statistics from top leagues worldwide, accumulating a dataset of over 6,000 matches
- Applied basic statistical methods to uncover the primary factors driving team success
- Produced statistical models to measure how various performance metrics impact match outcomes

Online Market Place | *Java, Git*

March 2023 – May 2023

- Collaborated in a team to develop a real-time marketplace platform enabling interactions between buyers and sellers.
- Designed and implemented two distinct user interfaces for sellers and buyers
- Built a secure login system with account recovery features to protect and manage user accounts

SKILLS

Languages: Java, Python, SQL, JavaScript, HTML/CSS, R, Bash

Developer Tools: Git, VSCode, PyCharm, IntelliJ, Eclipse, Spyder, QGIS

Libraries: Pandas, NumPy, Matplotlib, BeautifulSoup4, Selenium, sklearn, NLTK, re