Adam Yeo

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Skills & Interests

Data Tools/Languages: Python, SQL, Excel, R, Microsoft Suite, PowerBI, Tableau, Oracle DBMS
Python/ML Libraries: Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn, NLTK, Jupyter
Interests: Sports betting, Mob films, Learning languages, Cooking authentic pasta, Reading biographies

Experience

Bioinformatics Intern   **May 2022 – August 2022**
University Health Network   Downtown, Toronto

- Parsed and cleaned **1M+ raw datasets** of genomic sequences using BCFTools to process for visualization
- Constructed a wide array of **data visualizations** (boxplot, histogram, heatmap, etc) using **Matplotlib** & **Tableau**
- Implemented **correlation matrices** using **Pearson rank** model to **reduce lab costs** for specimen comparisons
- Wrote automated scripts to pull and modify organoid data & export as CSV files to **increase workflow** by **20%**
- Created weekly **MS PowerPoint** slides to present my analyses to senior cancer researchers and lab technicians

Personal Projects & Achievements

Intact Data Challenge Winner | *Naive-Bayes Medical Specialty Classifier*   **Feb 2023**

- Developed a **Multinomial Naïve-Bayes** classification model that predicts medical specialties from 4000+ medical insurance claims from Intact
- Utilized NLP text preprocessing with **NLTK** to clean raw transcripted data, using bag-of-words & lemmatization
- Implemented Scikit-Learn pipeline for **hyperparameter tuning** to maximize F1 Macro score

Hack the North 2022 Champion | *Reading-Performance Tracker for Dyslexia*   **Sept 2022**

- Developed a reading-performance tracker app on **Flutter** that analyzes reading patterns from eye movement
- Modified custom SDK using **HTTP protocol** to read real-time data from **AdHawk Backend** to the **localhost** server
- Reached **Top 12 Finalist** of 300+ teams at the **biggest hackathon in Canada** + $500 monetary reward

Sports Betting Arbitrage Calculator   **May 2022**

- Designed a Python script that takes in betting odds/stakes to compute implied probability for consistent profit
- Used financial concepts such as **market inefficiencies** to capitalize on the difference across various markets/apps
- Made a **605%** return within 3 months with a **net profit of $1513.22** from an **initial $250 deposit**

Extracurriculars

Events Coordinator   **January 2023 – Current**
UWaterloo Data Science Club   Waterloo, ON

- Organized E-Leetcode Sessions and DS/ML workshops (Tableau, NLP, ...) to help students in their job search
- Organized fun social events (Movie nights, Scavenger hunt) to bring together the DS/ML community at UW

Research Assistant   **October 2019 – June 2020**
Princess Margaret Cancer Centre   Downtown, Toronto

- Wrote automated scripts using the **Xlrd** Python package for **data formatting** of specimen data in Microsoft Excel
- **Biorepository software** handling for a database that handles **39K+** cancer patients registered to PMCC
- One of **four** students in all of the Toronto District School Board to be selected for a PMCC research position

Education

University of Waterloo   Waterloo, ON
Candidate for an Honours Bachelor of Mathematics   Sept 2021 – April 2025
Major in Statistics with a Minor in Computing & Economics