YUKTHI WICKRAMARACHCHI

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EDUCATION

3.77/4.0 GPA across all Math, Stats and Computer Science Courses (21 courses)

Coursework, Statistics and Computer Science Concentration, **University of Toronto**   **2021-2023**
- o   Completed upper level courses in Algorithms and Data structures, Databases, Operating Systems and Machine Learning

Honours Bachelor of Science, Life Science Major, **Queen's University (3.67 GPA)**   **2016-2020**

EMPLOYMENT

Predictive Systems Engineer (Internship), Deep Genomics, Toronto, Ontario   **May 2023 - December 2023**
- Developed Python package for computational gene therapy design
    - o   Implemented and productioni zed three novel workflows in conjunction with machine learning scientists
    - o   Tested and validated workflows using Pytest framework
- Collaborated with a diverse team of machine learning scientists and biologists on transformer model for gene expression prediction
    - o   Fine tuned model for cell health classification, achieved 95% held-out accuracy on heart cell dataset
    - o   Applied model to perform analysis on importance of genes for cell health
- Developed web app for wet-lab scientist data collection and experiment design
    - o   Used React-Ts framework with Redux toolkit for state-management
    - o   Developed test plan for comprehensive front-end testing
    - o   Refactored Javascript components to Typescript
- Implemented backend for new drug design implementation in Python
    - o   Responsible for implementation of REST API layer as well as the Use Case Layer for new entities
    - o   Utilised FastAPI framework for REST layer development

PROJECTS

Fantasy Premier League Predictive Model
- Built data scraper using Python to scrape football player data from www.fbref.com and Fantasy Football API
- Developed data cleaning and feature engineering pipeline for automated data processing
- Trained and tuned XGBoost Regressor for optimised player point projections

Newtapp Social Media Application Prototype (Course Project)
- Developed interest based social media web application with a Java backend and React-JS frontend
- Deployed PostegreSQL database for data storage
- Designed backend API server to handle user account creation, user conversations and user text posts

Languages & Technologies

Languages: Python, C, Java, Javascript, Typescript, Bash, HTML
Technologies: Git, PostGreSQL, React, Jupyter Notebook