**Yixin Tian** /yeeˈshin tian/

A close up of a sign

Description automatically generated

[linkedin.com/in/yixintian](http://www.linkedin.com/in/yixintian)

[yixin0829](https://github.com/yixin0829)



(Contact info provided upon request)

**EDUCATION**

**B.A.Sc. in Electrical and Computer Engineering**

Class of 2022

University of Toronto

CGPA: 3.68/4.0

**Related Coursework:**

Probability & Random Processes

Object-Oriented Programming

Algorithms & Data Structures

Fundamental of Accounting & Finance

Engineering Economics

**Self-Learning:**

Coursera Stanford ML Course

Udemy Python ML Course

Google ML Crash Course (TensorFlow)

**SKILLS**

**Software:**

Python, SQL, C, C++, HTML / CSS, JavaScript, Git, Vim, Linux

**Data Analysis & ML:**

NumPy

pandas

beautifulsoup4

Matplotlib

Seaborn

scikit-learn

TensorFlow

NLTK

Jupyter Notebook

Google Colab

MATLAB

Octave

MS Excel

**EXPERIENCE**

**DATA ENGINEER** **May 2020 - Present**

Global Spark

* Developing Python script to automate Hack the Globe workshops scheduling
* Collecting and analyzing web traffic data using Google Analytics

**SUMMER PROJECT INTERN** **Jun 2020 - Aug 2020**

Engineering Career Centre

* Focused on the Industry Classification Project. Classified 1,300 employers into 41 industries & 19 sectors, performed exploratory analysis and developed strategies for expanding the PEY Co-op Program in different industries
* Automated filling 1,300 web forms with Python to improve the efficiency by 75%
* Analyzed job posting data & work term data by creating interactive data dashboards and data visualizations with MS Excel & Python
* Supported the Co-op Coordinator Team in multiple other projects such as preparing analysis visualizations & process flow, tax credit tracking, salary statistics etc.

**INTERNATIONAL STUDENT EXPERIENCE AMBASSADOR Jun 2019 - Sept 2019**

Centre for International Experience

* Interacted with incoming international students to provide guidance on university life
* Initiated data collection of received emails and identified the association b/w the FAQs

**PROJECTS**

[**WINE QUALITY CLASSIFICATION**](https://github.com/yixin0829/wine_quality_multi_label_classification) **Python (Kaggle, NumPy, pandas, Seaborn, scikit-learn)**

* Trained multi-label wine quality classifiers using logistic regression, K-NN, and SVM
* Analyzing different model’s performance (F1-score) & optimizing by performing feature engineering (principal component analysis) and applying oversampling technique

[**PYTHON WEB DATA SCRAPER**](https://github.com/yixin0829/web_data_scraping_project) **Python (beautifulsoup4, Matplotlib, pandas, NLTK)**

* Scraped data of 1,000+ geographical articles (keywords, titles, authors, publish date) from Alberta Energy Regulator’s website and performed exploratory data analysis

[**“GOOGLE MAP”**](https://docs.google.com/presentation/d/1Rd_2XV16KO-d5kMnODrQgLrYxBXi4n5Fhie-UE0M5OY/edit?usp=sharing) **API, C++ (STL), GTK, Git**

* Collaborated in a team of three to develop a usable GIS for travellers
* Implemented annealing simulation algorithm and boosted path quality by 13%
* Designed and Implemented the UI using GTK graphical package
* Implemented pathfinding algorithm such as A\*, Dijkstra's, BFS

[**FPGA IMAGE PROCESSING MACHINE**](https://github.com/yixin0829/ece241_fpga_final_project) **Verilog, ModelSim, Quartus, VGA**

* Implemented an image processing machine that contains 12 filter effects in total including Sobel edge detection, Gaussian blur, box blur, emboss etc. with any 24-bit coloured 160 x120 pixel-sized image (.mif)

**LEADERSHIP & EXTRACURRICULARS**

**ORIENTATION SUB-COMMITTEE CO-CHAIR (PHOTOGRAPHY) May 2020 - Sept 2020**

Engineering F!rosh Week 2T0

* Trained and coordinated 24 photography volunteers to photograph 800+ students during the first-ever engineering online F!rosh Week
* Photographed profile pictures for the Orientation Committee members and head leaders

**MENTEE Sept 2019 – Present**

U of T Engineering Alumni Mentorship Program