# Yuze (Lucas) Fu

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# **EDUCATION**

#### University of Toronto

Sep 2023 - 2027 cGPA: 4.00 / 4.00

HBSc - Co-op Specialist in Computer Science (Comprehensive Stream)

- Co-op Sepcialist in Mathematics (Comprehensive Stream)

**Courses:** Intro to Computer Science, Software Design, Computation Theory, Designing Systems (UX), Calculus, Linear Algebra, Discrete Mathematics, Intro to Probability, Intro to Data Science, Intro to Microeconomics and Macroeconomics.

Awards: 2023-2024 University of Toronto Scholars (1,500 CAD)

2023-2024 University of Toronto Scarborough Dean's List

2020 Second Prize in the National Olympiad in Informatics (NOIP2020)

# SKILLS

Languages: C, C++, Python, Java, HTML, CSS, JavaScript, R, Basics

Tools: Figma, Git, VS Code, Office Suite, RStudio, OpenRefine, 3D-Modeling (Autodesk)

Development: Data structures and Algorithms (competitive programming), UI/UX design

ML / DS: Pandas, KNN (numpy), OpenCV (cv2), tidyverse, ggplot, decision tree, random forest

#### **PROJECTS**

# **Automatic Lawn Sprinkler Irrigation System (Machine Learning)**

Jul 2021

Interl AI for Youth Express

- Designed an automatic lawn irrigation system using **Pandas** and **OpenCV** in Python.
- Built the project in just two days as part of Intel AI for Youth Express.
- Implemented predictive algorithms KNN and Dewarping to optimize water usage based on environmental data.

# I'MENU - OCR and Al-Powered Restaurant Menu App (Full-Stack)

Oct 2023

Hackathon: Hack the Valley 8

- Collaborated with a team during a 36h hackathon to create an app helping users better understand menus.
- Integrated OCR to scan and interpret menus, and used OpenAI to provide descriptions and recommendations.
- Used **Javascript** as front-end and **Python** as back-end.

# Statistical Analysis on Research Project Investments by the Ministry of Colleges and Universities in Toronto STAA57H3: Intro to Data Science (UofT) Project Mar 2024 - Apr 2024

Analyzing and visualizing investment data with plots, graphs, T-test and Var-test using RStudio.

- Conducted data cleaning and data wrangling on a dataset (from open.toronto.ca) with 5521 entries.
- Applied statistical models including bootstrap, linear regression, and logistic regression with 81.7% accuracy

# MentorU - Mentorship Matching System (UI / UX)

May 2024 - Augest 2024

CSC396Y0: Designing Systems (Germany Summer Abroad)

- Developed an app interface using Figma to match university freshmen with mentors.
- Conducted **background research** through surveys and interviews to identify user needs.
- Improved **user experience** by iterating on the design through multiple **usability tests**.

# **EXPERIENCE**

### Teaching Assistant (CSCA67H3: Discrete Math)

Sep 2024 - Dec 2024

University of Toronto Scarborough

- Conducted weekly 1-hour tutorials to reinforce course concepts through exercises and guided problem-solving.
- Held weekly office hours to support students, answering questions and clarifying complex topics.
- Assisted in **grading** quizzes, assignments and exam, providing **feedback** to enhance student performance.

# **Academic Director**

Oct 2024 - Present

GDSC (Google Developer Student Clubs - UTSC)

- Organized an **Al workshop** on generative models for photo enhancement, handling materials and promotion.
- Planned interactive **DevFest** activities, focusing on ML demos and networking, while coordinating promotions.

#### Senior Director of R&D (Research and Development)

Sep 2024 - Present

CSEC (Computer Science Enrichment Club at University of Toronto)

- Led a **research reading group** on edge technology, hosting monthly discussions on emerging trends.
- Coordinated guest speech with professors and specialists, offering insights from academia and industry.
- Collaborated on selecting research papers, promoting intellectual growth and knowledge sharing.