## David Hu

## EDUCATION

## University of Toronto

Toronto, ON

Honours Bachelor of Science: Computer Science Specialist, Mathematics Minor

Sept. 2021 - April 2026

Relevant Courses: Intro to Software Engineering, Software Design, Algorithms Design and Analysis, Software Tools and Systems Programming, Intro to Machine Learning, Intro to Artificial Intelligence, Intro to Databases

Extra Curricular: UTM League of Legends Top Laner, UTM Men's Basketball Player

## TECHNICAL SKILLS

Languages: Python, Java, C, SQL, JavaScript, HTML/CSS, Bash, Assembly

Frameworks: React, Flask, JavaFX, JUnit, pytest, Pygame

**Developer Tools:** Git, Microsoft Azure, IBM Cloud, Linux, PostgreSQL, VS Code pandas, NumPy, Matplotlib, scikit-learn, OpenCV, TensorFlow

#### EXPERIENCE

## **Information Technology Intern**

May 2024 – Present

Mold-Masters Limited Georgetown, ON

- Managed IT help desk by logging, answering, and closing tickets.
- Troubleshot and resolved hardware, software, and network issues.
- Created comprehensive documentation for troubleshooting and installation procedures.
- Developed a Python script to web scrape over 9000 tickets for analysis.

## Machine Learning Intern

Jan. 2024 - Mar. 2024

M2M Tech Vancouver, BC

- Developed machine learning classification models using Microsoft Azure.
- Curated and preprocessed a diabetes dataset with over 10,000 entries.
- Trained and deployed the classification models online using Azure computing resources.

# Python Instructor Three-Flavors Kids' Club

July 2022 – Aug. 2022

Markham, ON

• Led educational summer camp programs focused on Python programming.

- Let educational summer camp programs focused on Lython programming
- Fostered a learning environment for programming and game design skills.
- $\bullet$  Implemented engaging and interactive educational strategies for camp attendees.

#### Projects

## League of Legends Data and Statistical Analysis

Python, Pandas, Matplotlib, scikit-learn

- Analyzed 310,000 games from 3,100 players using the Riot LEAGUE-V4 and MATCH-V5 API.
- Investigated optimal session lengths, win/loss streaks, and the impact of breaks on gameplay performance.
- Visualized data trends and outcomes with Matplotlib to facilitate analysis.
- Applied machine learning techniques using scikit-learn and pandas to identify key patterns.

## StockThePast

Java, JavaFX, Git, Agile Methodologies

- Developed an application simulating and teaching stock market trading.
- Utilized Java, object-oriented programming (OOP), and JavaFX for application development.
- Employed Git for effective version control.
- Adopted agile methodologies in a group of 4 people for efficient project management.
- Applied design patterns aligned with SOLID principles to enhance application functionality.

#### PokeCardtel | DeerHacks 2024

Python, OpenCV, Flask, TensorFlow, React Native

- Developed a React Native Pokemon PSA grading app for DeerHacks.
- Utilized Python and OpenCV to preprocess over 40,000 images.
- Trained a CNN model using TensorFlow and VGG16 architecture to achieve a 90% accuracy.
- Created API using Flask to combine frontend and backend.