# **Axel Tang**

### Education

**University of Toronto** 

2025 - Expected 2027

Master of Engineering (Emphasis on Data Analytics and Machine Learning)

Toronto, Canada

• Relevant Coursework: Applied Deep Learning, Foundation of Data Analytics and Machine Learning, Intro to Cloud Computing

University of Ottawa

Honours Bachelor of Science in Computer Science (GPA: 3.51 / 4.00)

Ottawa, Canada

2020-2024

• Honours and Awards: Dean's Honour List, International Merit Scholarship

Credentials 2025

Post Grad Certifications Remote

Harvard Online: Data Science for Business
 Deeplearning.Al: Machine Learning Specialist

# Recent Work Experience

Sky Dream Mar 2025 – May 2025

Information Technology Instructor

Hong Kong

• Provided coding and aviation related education to top elementary school students

### Hong Kong General Chamber Of Commerce

July 2024 - Aug 2024

Information Technology Intern

Hong Kong

- Implemented a motion detection and face recognition system using Python OpenCV contour detection, enabling security camera monitoring.
- Used fuzzywuzzy algorithm to compare data from SQL database to extract abbreviated names.
- Re-designed intranet webpages with ASP.net & CSS and data entry into system.

InteractHealthPro Mar 2024 – June 2024

Software Developer Intern

Canada

Ensure smooth transition from one CMS system to another and improved operational efficiency

## **Projects**

Ongoing RPS Project | Jupyter Notebook, Python, Torch, CUDA

https://github.com/AxelTWC/RPS-PJ

- Trained a CNN in PyTorch as a self-directed project to explore deep learning fundamentals..
- Used data augmentation and ResNet18 transfer learning, achieving 99% validation accuracy.
- Built a full pipeline with CrossEntropy loss, Adam optimizer, batch processing, and checkpointing.

## Umple | Java, Internal Language: UML

https://umple.org

- Actively contributed to an open source project (model-oriented programming tool) with 2 million visitors.
- Tasked with implementing and resolving **Java** and **Umple** issues while ensuring effective version control and **CI/CD** pipeline.
- Submitted multiple Pull Requests; such as extraneous bracket detection with Regex and Batch Scripts for Windows
  Development

## **HumblexMC Server** | Java Plugin Developer, Business Management

https://humblex.net

- Developed server plugins, automate deployment, establish online presence, lead the development team and enhance user engagement.
- Developed Java plugins with Maven Bukkit API, automated deployment with Batch Scripts, optimized the server's
  website with SEO techniques to improve pagerank, led the team using Trello and Miro, and executed advertising
  campaigns achieving 465k views.
- Increased system reliability by 90%, improved **pagerank** from 33 to 4, effectively managed the development team, and significantly boosted server growth and user engagement.

#### Technical Skills

Languages: Python, Java, C#

Concepts: Artificial Intelligence, Machine Learning, Deep Learning, Neural Networks