# Taeyang (Dennis) Kim



#### **Education**

### **University of Toronto**

2021-2024

Honours Bachelor of Science, Computer Science, Co-op Relevant Courses: Software Tools & Systems Programming, Machine Learning and Data Mining International Student Ambassador

#### Skills

Languages: Python, C/C++, JavaScript, Java, Bash

**Technology/Frameworks:** JavaScript, HTML, CSS, React, Node.js, SQL, AWS, Git, OpenCV PyTorch, Tensorflow, scikit-learn, Scrum, JUnit, Mockito

## **Experience**

# Korea Advanced Institute of Science and Technology

Aug 2020 - Nov 2020

Research Intern

- Trained a convolutional neural network, working heavily with **PyTorch** and **Anaconda**, allowing the model to classify images with an accuracy of 86.7%
- Extended the model using **OpenCV** to enable real-time face recognition for autonomous car test
- Responsible for the data plotting feature using **Python**, an important component of the project that enabled the analysis of the effect of epochs in machine learning

# Ministry of Education (iACCESS BRANCH Ontario Canada

May 2023 - Present

- Application Programmer Analyst
  - Utilized **SQL** and **DAX queries** to design and develop data visualizations and manipulations, resulting in a significant reduction in monthly report generation number, from 45 to 23
  - Created a machine learning model using **PySpark** and **Python** to predict private cost audit tuition fees, providing estimates for 400,000 applications
  - Collaborated with stakeholders to summarize OSAP applications across academic years, amounting to a total of 4.7 billion in tuition fees, and supporting 600,000 active daily users.

#### **Projects**

### **Course Offering Calendar Android App**

August 2022

- Used **Gradle** and **Java** to create a course calendar Android app that considers prerequisites and session offerings, with **Git** for version control
- Implemented Real-time **Firebase** and **SQLite** to enable real-time updates of user-generated data for all other users of the application
- Utilized **Mockito** and **JUnit** to facilitate unit testing, which allowed for fast development of the program and improved code quality
- Conducted **Scrum** meetings as Scrum master and used **Jira** to keep track of the user stories to allow better communication and collaboration