

TYLER KOWALSKI

☎ 1(647)761-4666 ✉ tkowalsk@uwaterloo.ca [linkedin.com/in/tyler-kowalski-a51226212/](https://www.linkedin.com/in/tyler-kowalski-a51226212/) github.com/tkowalski9938
🌐 tkowalski.ca

Technical Skills

Languages: Python, SQL, Racket, HTML/CSS
Developer Tools: VS Code, GitHub, Jupyter Notebook
Technologies/Frameworks: TensorFlow, NumPy, CV₂, Matplotlib

Education

University of Waterloo Sep. 2021 - Dec. 2025
Bachelor of Computer Science Waterloo, Canada

Professional Development (Online Courses)

DeepLearning.AI Sep. 2021
Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization

DeepLearning.AI Aug. 2021
Neural Networks and Deep Learning

Experience

UTinder Sep. 2021
Computer Vision Project for Hack the North

- Developed a convolutional neural network that rates the attractiveness of a user's Tinder profile using **TensorFlow Keras** and **Python**
- Implemented dropout and Adam optimization to reduce variance. Image normalizing layers were added within the model for ease of deployment

Pokemon ML Aug. 2021
Image-based Binary Classifier Identifying Grass-Type Pokemon

- Created an DNN that predicts whether or not a given image is a grass-type Pokemon with 86% test accuracy, entirely with **Python**, **CV₂** and **Numpy**
- Worked on manually, vectorizing and preprocessing datasets, implementing forward propagation with linear algebra, and implementing backward propagation, using gradient descent, with matrix calculus

Wellness Bot July 2021
NLP Project for Explore Hacks

- Designed a bag-of-words model, using word embedding with **Tensorflow Keras** and **Python**, that detects suicidal messages
- Utilized L2 regularization and mini-batch gradient descent in training the model

Boosted Bot July 2021
Discord Bot that Parses and Analyzes Data from League of Legends Games

- Built a discord bot with discord.py that finds new League of Legends games played of users put on a "checker" by making regular HTTP requests to Riot Games' API, provides a detailed statistical analysis of the new game, and then stores the data in a local database using **SQLite**

Awards / Extracurriculars

SLG Scholarship in Mathematics June 2021
Regional Scholarship

- Achieved highest top 6 average including 3 university math courses in York Region (rank 1 / 11, 081)

Governor General's Academic Award June 2021
High School Award

- Achieved highest grade 11 and 12 combined average in high school (rank 1 / 416)

AP English Award June 2021
High School Award

- Achieved highest AP English mark in high school (99%)