




SKILLS	Languages: Python, SQL, C, C++, Java, MATLAB, R Frameworks: Pandas, NumPy, Scikit-learn, TensorFlow, Keras, OpenCV, PyTorch, spaCy
EXPERIENCE	BlackBerry – Research and Software Developer Jan 2021 – April 2021 <ul style="list-style-type: none">Created a thread manager in C++ to resolve the producer-consumer synchronization problemTrained CNN models for facial verification in TensorFlow and Python, with Keras for hyper-parameter tuning, which achieved 86% accuracyImplemented the YOLOv3 model for a real-time object detection system using OpenCV Geminare – Machine Learning Developer May 2020 – Aug 2020 <ul style="list-style-type: none">Trained a semantic segmentation model for object detection and trained five CNN models for detailed classification in TensorFlow and Python using transfer learningImproved general image tagging accuracy from 74% to 95%Synthesized images using SMOTE and image transformations to oversample minority classesTrained spaCy models to recognize legal entities and extract semantic relationshipsUsed the cosine similarity of sentences from contracts to create extractive summaries Sunnybrook Focused Ultrasound Lab – Software Developer <i>Image Processing Project</i> Jul 2019 – Aug 2019 <ul style="list-style-type: none">Automated the detection and segmentation of liver lesions, which improved the pipeline speed by 10x, by using the Gabor filter and watershed transform in Python and MATLAB <i>Signal Processing Project</i> Jul 2018 – Aug 2018 <ul style="list-style-type: none">Implemented fractal dimension algorithms to locate bone index and tumours with 95% accuracy using MATLAB and SQL
PROJECTS	UW Data Science Club – VP of Education  Sep 2020 - present <ul style="list-style-type: none">Designed and presented workshops about neural networks with TensorFlow, clustering techniques with scikit-learn, and data analysis with NumPy and Pandas Face Mask Detection  Aug 2020 – Oct 2020 <ul style="list-style-type: none">Trained a CNN model for detecting face masks with 97% accuracy using TensorFlow in PythonUsed the OpenCV Haar-cascade classifier for real-time face detection MLB Pitch Analytics  Jun 2020 – Aug 2020 <ul style="list-style-type: none">Used k-means clustering with scikit-learn and trained neural networks using Tensorflow in Python for each MLB pitcher to classify their pitches with 85% accuracy
AWARDS	American Invitational Mathematics Examination Qualifier 2019 <ul style="list-style-type: none">Offered to students in the top 5% on the American Mathematics Competition 12 (AMC12) Canadian Champion (Perfect Score), Pascal Math Contest 2016 <ul style="list-style-type: none">Top score out of 25,000 students on the Pascal Math Contest
EDUCATION	University of Waterloo – Bachelor of Software Engineering (B.SE.), AI Specialization 2019 – 2024 <ul style="list-style-type: none">Average: 91% Dean's Honour List Upper Canada College – International Baccalaureate Diploma 2015 – 2019 <ul style="list-style-type: none">Average: 99% IB Total: 44 (top 0.78% globally, finished second in graduating class)