ABDELLAH GHASSEL

- ✉ aghassel@gmail.com
- 📞 (613) 809-8436
- in abdellahghassel
- ⬡ aghassel

Education

Queen's University — 2020 to 2024
BASc Computer Engineering
Dean's Honour List with Distinction
GPA: 4.2/4.3

Coursework

Data Structures and Algorithms

Object-Oriented Programming

Computer Architecture

Digital Systems

Engineering Design and Practice

Skills

SOFTWARE

C/C++

Python

Java

Git

HTML

JavaScript

VHDL

MATLAB

Solidworks

FRAMEWORKS

Scikit-Learn

Pytorch

Tensorflow

LANGUAGE

English

French

Arabic

Employment

Queen's University — Jan. 2022 to Present
Teaching Assistant
- Facilitated students by clarifying topics in APSC221: Engineering Economics
- Graded assignments/midterms and proctored exams
- Answered course-related questions in discussion forums through **D2L**

Queen's Engineering Society — Aug. 2021 to Present
Englinks Personal Tutor
- Provided one-on-one and small group tutoring services to improve student understanding of a variety of subjects
- Adapted teaching strategies for each student's learning style

Leadership & Activities

QMIND: Queen's Machine Intelligence and Neuroevolution Design
Internal Design Team
- Created a climate prediction model by deploying a convolutional neural network using **Python Scikit-Learn**
- Developed a user interface to see graphs/predictions using **time-series** data modelling and **regression analysis**

Google's Student Developer Club
Executive Technical Team
- Created the GDSC Website for the Queen's Chapter using **HTML, JavaScript and CSS**
- Tasked with the development and maintenance of the Qlicker app using **Node.js**

Queen's BioMechatronics Team
Software Development Team
- Analyzed motion and sensory data of the exoskeleton
- Determined quantitative feedback to optimize the team's prototype

Projects

ReCoin, 3rd Place @ UofT Hacks — Jan. 2022
- Developed an app that utilizes an **image-classification neural network** to identify waste captured by the user's camera
- Utilized **Pytorch** and **ResNet** to achieve a **94% accuracy** on the validation and testing sets after eight epochs of training
- Alerts users of drop sites for their recyclable products at partnered local businesses and to exchange for credit

Clarity, Best Wearable Gadget @ MakeUofT — Feb. 2022
- Designed interactive smart glasses using Google Cloud Vision's **API** to detect the emotion of a person in real-time through a modular camera, to facilitate social interactions for those with developmental disorders
- Used Raspberry Pi OS, **SOLIDWORKS** and **Python** to include capabilities such as the weather, reminders and schedules

Cushion Buddy — Dec. 2021
- Programmed an autonomous orthopedic seat cushion using **Arduino** to improve the health of employees and students
- Comprised of circuitry connected to a battery, load sensor, force sensor and a vibration motor that worked in sync to notify the user to take a break, using a website and to set the default time duration

Queen's Capture The Flag — Nov. 2021
- Lead a three-person team to solve a variety of challenges in an information security competition
- Challenges include cryptography, web exploitation, steganography and reverse engineering

Volunteering

Queen's Engineering Society — Oct. 2020 to Sept. 2021
Orientation Executive
- "Thundermugz" Day Coordinator for Queen's Engineering Orientation Week
- Organized a $10,000 budget and managed the logistics for 1,200 people involved
- Hired and conducted leadership training for over 260 orientation leaders

Nepean, Rideau and Osgoode Community Resource Centre — Aug. 2016 to Sept. 2019
Tools4School Organizer
- Helped the community give school supplies and packed bags and supplies for low-income families
- Organized lists and received tools from suppliers

Awards

Schulich Leader Scholarship
Awarded Canada's most prestigious scholarship in recognition of entrepreneurial leadership skills and academic excellence

Queen's Principal Scholarship
In recognition of 95%+ secondary school cumulative average