Abdellah **Ghassel**

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Education

Queen's University   *Kingston, Canada*
BACHELOR'S OF APPLIED SCIENCE IN COMPUTER ENGINEERING *(Dean's Scholar)*   *Sept. 2020 - April. 2024*
- **Schulich Leader**: Awarded Canada's most prestigious scholarship for entrepreneurial leadership skills and academic excellence, valued at **$100,000**
- **Relevant Courses**: Data Structures & Algorithms (**C/C++**), Object-Oriented Programming (**Java**), Data Analytics (**Python**), Operating Systems (**Linux**)

Work Experience

Ubineer   *Remote - Toronto, Canada*
NLP DEVELOPER   *July 2022 - Sept. 2022*
- Extracted and algorithmically-parsed data from 15 SEC fillings using natural language processing methods such as **NLTK** and **BeautifulSoup4**
- Developed pre-processing and post-processing functions to clean and chunk the data
- Built the data pipeline using **APIs**, workflows, and **GCP** cloud functions to extract recent financial information for stakeholders

Bank of Canada   *Ottawa, Canada*
SYSTEMS DEVELOPMENT ENGINEER   *May 2022 - Aug. 2022*
- Spearheaded the integration of **CyberArk DNA**, **SailPoint** and **ServiceNow** context data to report on 12 Used Cases to identify vulnerable accounts
- Implemented **PowerBI**, **mySQL** and Microsoft **PowerApps** to automate data processing and the application of custom functions to 100,000 accounts
- Incorporated the **Agile** framework using **JIRA** and Confluence to monitor the project's progress and document major changes

Queen's University   *Kingston, Canada*
TEACHING ASSISTANT: *APSC221 Engineering Economics*   *Jan. 2022 - Aug. 2022*
- Marked assignments/exams and proctored midterms
- Answered course-related questions in discussion forums on **D2L**

Extracurricular Activities

QMIND: Queen's Machine Learning and AI Hub   *Kingston, Canada*
INNOVATION DESIGN TEAM   *Sept. 2021 - Present*
- Created a climate prediction model by deploying a convolutional neural network using **Python**, **Scikit-Learn** and **Pandas**
- Developed a user interface to see graphs/predictions using time-series data modelling and regression analysis
- Presented and published a research paper at CUCAI (Canadian Undergraduate Conference on AI)

Google's Student Developer Club   *Kingston, Canada*
EXECUTIVE TECHNICAL TEAM   *Sept. 2021 - Present*
- 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**

Projects

iYashi | INDEPENDENT   *Personal Project* | *July 2022*
- Designed and 3D-printed motorized rehabilitation device that aids stroke victims to regain motor functionality
- Programmed a servo motor to adaptively apply resistance for optimal training using a PID loop algorithm on an **Arduino**
- Serialized the data through protocol buffers to allow for secure data transfer using **ProtoBuf** and **Solidity** for smart contracts

ReUnite | BLOCKCHAIN PRIZE   *TOHacks* | *June 2022*
- Deployed software to verify refugee data in camps and aided them to find their families, cater resources, and new homes
- Implemented **Azure Face API** to authenticate refugee faces and personal information to sensitive databases
- Applied smart contracts via **Solidity** and **Ethereum** to be easy-to-understandable and translatable for sponsors and refugees

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
- Facilitated social interactions to assist people with developmental disorders to read four social cues
- Used **Raspberry Pi OS**, **SOLIDWORKS** and **Python** to include capabilities such as the weather, reminders and schedules

ReCoin | 3RD PLACE   *UofT Hacks IX* | *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 8 epochs of training
- Alerts users of drop sites for their recyclable products at partnered local businesses and to exchange for credit

Technical Skills

Programming Languages: Python, C/C++, Java, Git, HTML, CSS, JavaScript, VHDL, Assembly, MATLAB, Solidworks
Python Libraries | Frameworks: NLTK, Scikit-Learn, Matplotlib, NumPy, Pandas, PyTorch, Tensorflow