Miiyu Fujita

www.linkedin.com/in/miiyu-fujita | +1 (514) 226-8388 | miiyu.fujita@mail.mcgill.ca | https://miiyu-fujita.netlify.app/

education

McGill University Sep. 2020 - May 2024

B.Eng., Electrical Engineering · GPA: 3.92/4.00

Activities & Involvement: Vice President Finance - *Sustainability in Engineering at McGill*; Ground Station SW & HW Project Lead - *McGill Rocket Team*; Co-Founder & Co-Facilitator - *McGill Book Club*; MAIS202 - *McGill Artificial Intelligence Society*

skills

Technology: Proficient in Java, Python, HTML, CSS, JavaScript, Bootstrap Framework, React, VHDL, ModelSim-Altera; Familiar with MATLAB, Git, Terminal, FXML, Raspberry Pi, NX CAD

Languages: Fluent in English, Japanese and French

experience

Undergraduate Student Researcher | NSERC Undergradute Student Research Award May 2022 - Aug. 2022

McGill University | https://github.com/miiyu-fujita/sure2022

- Developed a step-by-step method to evaluate the effect of distributed energy resources (ex: solar panels, EV chargers) on electricity distribution networks using software tools, namely GridLAB-D and Python
- Wrote Python script to parse through GridLAB-D output JSON file, retrieve and output relevant data values in CSV format to increase efficiency of data retrieval by ___% and for easier visualization of data
- Wrote Python script to read and perform matrix multiplications on data from csv files to calculate voltage unbalance occurrences to increase understanding of data, using pandas and numpy libraries

Deputy Project Manager | Documentation Lead Mar. 2022 - Apr. 2022

McGill University

- Led a team of 6 engineering students during design process of automated storage and retrieval system
- Wrote Python code to interface with color sensor to detect and identify color used during delivery and sorting
- Improved system performance through iterative testing to obtain 100% success rate of functions (sorting/delivery)
- Outperformed system requirements for sorting and delivery processes by 400% and 167% respectively
- Authored system design, testing, hardware, software, project management and final design reports to provide adequate, updated documentation to client
- System implemented in Python using Rasberry Pi and LegoEV3 tools (i.e. Color & Touch Sensors, Motors)

Ground Station Software & Hardware Project Lead | Avionics Member Sep. 2020 - Oct. 2021

McGill Rocket Team

- Designed and implemented live rocket telemetry ground station user interface
- Presented introductory lecture on ground station projects to new recruits during 2021-22 design cycle bootcamp
- Wrote back-end Java code to receive and parse rocket telemetry from rocket's flight computer, radios, and antennas
- Implemented front-end GUI functionality to present live rocket telemetry through animated graphical displays
- Followed version control practices to ensure smooth transition between design cycles (git & github)

Cyber/IT Risk Analyst Intern Jun. 2021 - Aug. 2021

Business Development Bank of Canada

- Performed technology risk assessment of 5 third party vendors based on SOC 2 Type II reports
- Facilitated 26 cyber risk training and awareness conferences by updating spreadsheets and providing IT support

projects

Computer Vision - Human Detection Jan. 2021 - Apr. 2021

https://github.com/miiyu-fujita/Custom-YOLOv3-Model-for-Human-Detection

- Cleaned, processed and created a custom dataset from Google's Open Images Dataset
- Trained a YOLOv3 CNN object detector with aforementioned custom dataset to identify human subjects in any image in Python