Abigail Adam

Engineering Physics Student (647)-519-6684 | acadam00@gmail.com | LinkedIn | Website

Education

Bachelor of Applied Science, Engineering Physics - University of British Columbia

GPA: 86% | Dean's List | Expected Graduation: May 2028

Summer Program - Harvard University

GPA: A | June-August 2022

Skills & Abilities

AutoCAD | MATLAB and Simulink | C | C++ | Arduino | Java | KiCAD | Soldering | ROS | Linux (Xubuntu)

Technical Experience

Summer Research Student | Technion, Faculty of Physics | July 2024

- Participated in the International Undergraduate Summer Research Program, and worked with the High Energy Physics Group, supervised by Professor Yotam Soreq
- Analyzed electrical and mechanical functioning of instruments used in high energy physics to evaluate their relevance to Dr. Soreq's research

Designer Co-op | Jablonsky Ast & Partners | January to May 2025

- Performed an in-depth analysis of top-down construction based on hundreds of case studies, a method for building skyscrapers yet to be adopted in Canada, and pitched my conclusions directly to senior partners
- Helped develop models to predict rebar consumption on large projects to assist with accurate budgeting

Automation Team Member | UBC Agroponics | 2024 - present

- Assisted in the creation of an automated hydroponic system, specifically working on implementing a server
 using MQTT communication to interface between sensors, microcontrollers, and actuators to create a secure
 and scalable system
- Processing the data and creating visualizations of the time series data so the system can be monitored remotely

Projects

Exoplanet Characterization | The Life and Death of Stars Cumulative | June - August 2022

· Characterized a distant binary stellar system using data from the Transiting Exoplanet Survey Satellite (TESS) and EXOFAST v2 and wrote a <u>technical paper</u> on my findings

Autonomous Robot Competition | Coursework | July – August 2025

 Worked in a team to create an autonomous robot for ENPH 253, including designing the robot's electrical systems (PCBs, power distribution) and making libraries to interface with several sophisticated sensors in C++, including LiDAR, IR reflectance, and hall effect sensors

