Benjamin Probst

(647) 938-2953 | https://www.linkedin.com/in/ben-probst | 20bap1@queensu.ca

Education

Computer Engineering, Queen's University, Kingston, Ontario September 2021 – Present

C, Java, Python, VHDL, Assembly (RISC), PCB, FPGA, Linux, Git, 3D CAD, Circuit Design, Hardware

- Bachelor of Applied Science – expected graduation date: April 2025
- Notable Coursework: Information Structures, Object-Oriented Programming, Digital Systems, Computer Architecture, Electronics, Algorithms, Computer Networks, Embedded Systems.

Bayview Glen Independent School, Toronto, Ontario September 2017 – June 2021

- Ontario Secondary School Diploma – four times Heads Honor Roll (90+ cumulative average)

Internships

Technician, Terrapex Environmental Ltd. Toronto, Ontario May 2022 – August 2023

Written Documentation, Quality Assurance, Consulting, Project Development

- Performed quality assurance tests on building materials and inspected work executed by contractors to ensure adherence to engineering standards.
- Produced professionally crafted reports that served as critical assessments of the work performed, aiding in decision-making processes, and contributing to the overall project quality.
- Developed effective communication skills through extensive collaboration with project stakeholders, including project managers, clients, and contractors.

Projects

Rover Wheel Control System, Queen's Space Engineering Team October 2022 – April 2023

C++, ROS, Linux-Ubuntu, Bash, Git

- Researched and developed a sophisticated drive and wheel control system. This system featured a proportional-integral-derivative (PID) controller, enabling precise tuning of motor speeds based on the terrain, enhancing the rover's performance in varying conditions.
- Demonstrated expertise in C++ programming within the Linux-Ubuntu environment. Navigated complex projects and actively participated in code development, showcasing technical prowess.
- Team placed 1st in Canada and 7th in the world of 104 teams at the URC competition.

Food Tracking Application, Entrepreneurship Project January 2022 – April 2022

Java, API, Git

- Developed an Android application that revolutionized food management by efficiently storing and proactively notifying users about impending food item expirations.
- Orchestrated a successful Minimum Viable Product launch, culminating in a persuasive pitch presentation and a compelling product demonstration.
- Collaborated seamlessly within a cross-functional team, where my role included the integration of intricate APIs, further underscoring my proficiency in Java and Git.

Skills, Extracurriculars & Awards

- Two times Dean's Scholar for obtaining an Engineering Sessional GPA greater than 3.5.
- **Languages:** C, C++, Python, Java, HTML, CSS, VHDL, Assembly (RISC style for Nois II).
- **Tools:** Arduino, Soldering, Shell, SolidWorks, Altera Quartus II, LTspice, Git, Linux, ROS.
- Queen's Space Engineering Team – Rover Computer Engineer
- Queen's VEX U Robotics Team – Team Member
- Engineering Society of Queen's University – Software Developer