

# CARMELLI DAO

## Product-Focused Engineering Student seeking Spring 2024 PM Internships

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### EDUCATION

**Bachelor of Applied Science in Mechanical Engineering** – University of Waterloo Graduating May 2027

- **Involvement:** Product Management Club, Engineering Society, Engineering Ambassadors, Poker Club
- **Awards:** University of Waterloo President's Scholarship, Sullivan Entrance Award

### SKILLS

- **Languages:** C++, Python, HTML, CSS, React, JavaScript, SQL, PostgreSQL
- **Tools:** Figma, GitHub, Visual Studio Code, Confluence, Jira, Trello

### EXPERIENCE

**Product Engineering Intern** – Mycro Harvest September 2023 – December 2023

- Developed software architecture in Python, C++ for sensor suite for industry standard protocols (I2C, RS-485)
- Researched cost-reduction strategy, resulting in 60% reduction in production costs, saving \$10,000+ annually
- Managed product backlog and prioritized features based on stakeholder and investor feedback

**Mechanical Project Manager** – Midnight Sun Solar Car Team May 2023 - Present

- Oversaw a \$210,000+ solar car project, tracking budget constraints and timeline adherence
- Launched an onboarding plan, boosting new team members by 60% and tripling retention rates
- Secured over \$5000 in sponsorships to fully fund suspension, braking, and steering system

**Brake Systems Engineer** – Midnight Sun Solar Car Team January 2023 – April 2023

- Designed and analyzed parking brake components using SolidWorks FEA, ensuring safety compliance
- Collaborated with team members to integrate brake systems into aero body and chassis systems
- Documented and presented parking brake system designs and performance analysis within team

**Executive Engineering Ambassador** – University of Waterloo September 2022 - Present

- Placed top 10% in hours volunteered as an Engineering Ambassador among 179 volunteers for Fall 2023 term
- Promoted programs and spoke to 70+ prospective students at the 2022, 2023 Ontario Universities Fair
- Provided in person tours to 60+ guests for the 2022, 2023 University of Waterloo Fall Open House

**Events Director** - Engineering Society, University of Waterloo April 2023 - August 2023

- Orchestrated 3 events, managed catering for 270+ guests and boosted event attendance by 25%
- Collaborated with university staff and student organizations to ensure seamless event logistics

### PROJECTS

**Wayfinding Robot** January 2022

- Developed a C++ based wayfinding robot in Visual Studio, integrating SoftwareSerial library with 3+ sensors
- Achieved 2<sup>nd</sup> place among 80+ students, demonstrating adeptness in user-centric product development

**Automated 3-Axis Writing Robot** April 2023

- Oversaw development of a precise 3-axis writing robot using 3D printed and laser-cut parts, ensuring user-centric functionalities via C++ programming