

ZANE SHEPHERD

BASc Mechanical Engineering

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in [linkedin.com/zane-shepherd](https://www.linkedin.com/zane-shepherd)

🌐 zane-shepherd.github.io/Online-Portfolio/

Education

University of Ottawa

Ottawa, Ontario

Bachelors of Applied Science in Mechanical Engineering 7.98 GPA (≈ 3.7 on a 4.0 scale)

September 2020 - April 2024

Awards: Admissions Scholarship - \$3000 (2020), Merit Scholarship (2021,2022), Graduated Cum Laude

Experience

City of Ottawa Infrastructure and Water Services Department

Ottawa, Ontario

Engineering Assistant

May-August, (2023)

- Worked in quality assurance; inspecting and testing water main valves and new infrastructure for anode installation projects
- Applied engineering knowledge and developed technical expertise

Summit Reforestation

Smithers, British Columbia

Seasonal Tree Planter

May-August, (2021-2022, 2024)

- Worked 10-hour shifts, planting trees and getting paid per tree planted. I was responsible for managing my own quality and production. I worked consistently hard in all conditions and was very successful.
- Developed self-motivation, perseverance, and work ethic

Self-Employed Secodary STEM Tutor

Ottawa, Ontario

Tutor

September-April (2019-2024)

- Was hired to sit down with students for 1-2 hours and have them present me with problems they could not solve. From here I would attempt to understand their struggles and teach them the necessary theory and methods.
- Developed communication, problem solving, and coaching skills

Personal Projects and Technical Skills

Online Portfolio - [LINK](#)

September 2024

- Coded a website in HTML, having never been taught the language formally. The website is used to showcase my other projects.
- **Technical Skills:** HTML
- **Personal Skills:** Creativity, Initiative

Multi Spectral Turret - [LINK](#)

September 2023 - April 2024

- Designed, modelled and optimized a multi spectral turret for our client, ING Avionics. As a team, we reviewed technical literature, sketched a design, performed mathematical feasibility analysis, modelled the design in SolidWorks, and optimized it using Matlab and ANSYS
- **Technical Skills:** SolidWorks, Matlab, ANSYS (finite element analysis), Analytical Problem Solving (stress-strain analysis)
- **Personal Skills:** Teamwork, Leadership, Critical Thinking

Mars Rover - [LINK](#)

September 2021 - April 2024

- University of Ottawa engineering team on which I ideated, designed, manufactured and tested hardware and software for the rover.
- **Technical Skills:** SolidWorks, Additive Manufacturing, Matlab
- **Personal Skills:** Collaboration, Discipline

Other Skills

- Bilingualism (DELF B2 French certification)
- Working knowledge of Excel and various programming languages (Python, C, Arduino, JavaScript)

References

Available upon request