## **Contact Details**

Nicholas Fortune
Ontario, Canada
nicholasfortune.contact@gmail.com
NicholasFortune.ca

## Summary

A dynamic, self-driven aspiring Mechanical and Electrical Engineer with more than 6 years of experience in 3D design, embedded systems, computational systems, software development, web development, and leadership. I am skilled in designing, building, and programming innovative engineering projects, with a strong leadership and teamwork skills. I am detail-oriented with excellent organization and technical skills, and a highly motivated self-starter with a proven work ethic reflecting in superior results and achievements.

## **Experience**

Model Rockets and Planes | Independent Project | 2017-Present

- Designed, built, and launched five 3D-printed model rockets.
- Designed, built, and flew three 3D-printed RC planes.

FIRST Lego League Robotics Competition | Head Programmer & Team Leader | 2023, 2024

- Led and managed teams of eight members in two competitions.
- Designed and programmed interface structures and objectives for competition robots.
- Developed software and optimized autonomous navigation algorithms.

## Trebuchet | Academic Project | 2025

- Worked with a partner to create a life-sized trebuchet
- Applied woodworking skills and structural analysis to ensure proper function

## Guided Anti-Drone Missile | Independent Project | 2025

- Designed and built a custom flight computer for GPS and IMU sensor fusion navigation.
- Developed real-time guidance algorithms in C++
- Implemented data logging and telemetry for system performance analysis.

#### Skills

## Engineering and Programming

- KiCad, Fusion 360, OpenRocket, Arduino IDE
- Proficient in Python, C and C++, HTML, CSS, JavaScript, PHP
- PCB and circuit design, breadboard prototyping, soldering
- Woodworking

### IT and Tech

- PC Building, self-hosting, home servers
- Expert in Windows and proficient in Linux
- Excellent technology problem-solving skills

#### Communications and Teamwork

- Fluent in English, conversational in Brazilian Portuguese
- Basic understanding of French
- Strong Teamwork and Collaboration skills

## Documentation and Productivity

- Proficient in Microsoft Word and PowerPoint
- Expert with Google Calendar

## Other Skills

- Expert Drone Pilot
- Strong math skills
- Video editing and production

## **Interests**

- Engineering
- Programming
- 3D-Printing
- Cinematography and Video Editing
- Mathematics and Physics
- Challenging myself with new skills

# **Education**

# **Elementary School**

Collingwood, Ontario Graduating 07/2025

## **Achievements**

- Two-time 3rd place and one-time 2nd place winner at the County Science Fair
- Designed and developed a Guided Anti-Drone Missile
- Two-time competitor in FIRST Lego League Robotics Competition
- Designed and built my own website