

# WILL KILGORE

willkilgore@gmail.com

## Education

---

### McGill University

Aug 2023 – May 2027 (Expected)

*Bachelor of Engineering in Mechanical Engineering - GPA: 3.84/4.0*

- Dean's Honor List — Winter 2024 — GPA: 4.0
- Relevant Courses: Fluid Mechanics, Thermodynamics 1+2, Dynamics, Materials Science, Design Graphics

## Work Experience

---

### Parlee Composites

June 2025 – Aug 2025

*Fabrication Intern*

*Beverly, MA*

- Devised new prepreg composite layups that reduced void content and post-processing time of finished products, increasing production speed of small parts by up to 30%
- Designed and developed a geometric calculation tool to streamline bike fitting process for dealers
- Managed quality control of overseas bike frame construction, ensuring fit and finish of frames, documented recurring issues in received product
- Implemented a repeatable laser-engraving procedure to improve serial number legibility
- Utilized manual mill and shop tools to fabricate carbon components for commercial sale
- Prepared 2D cutting patterns in PatternSmith and executed cuts with Autometrix CNC cutter, reducing material waste and dead space in molds
- Processed carbon parts by filling, sanding, and surface prepping to meet quality requirements

### REI Co-op

Mar 2022 – May 2025

*Retail Sales Specialist*

*Reading, MA*

- Drove sales of outdoor equipment through customer engagement and product expertise
- Promoted REI memberships by identifying customer needs and explaining benefits
- Resolved customer issues through technical knowledge of gear and materials

## Projects

---

### McGill Rocket Team

Sept 2025 – Present

- Designed molds for a 42" composite nose cone as part of the aerostructures subteam
- Applied prior composite experience in prepreg and vacuum assisted resin infusion (VARI) to facilitate body manufacturing for competition rockets

### Carbon Fiber Bike Components

May 2025 – Aug 2025

- Designed and developed custom bike components to fit specific geometries while remaining lightweight through the use of forged carbon fiber and custom molds
- Used SolidWorks, Cura, and 3D printing for rapid prototyping of final product shape to validate geometry with minimal downtime
- Performed FEA in Abaqus to optimize strength-to-weight ratio and remove excess material

## Extracurricular Activities

---

### McGill Cycling Team

Aug 2023 – Present

*VP Financial*

- Managed team budget, fundraising, and sponsorships to sustain trip subsidies and financial support
- Organized and led social rides (2-4 per week) to foster team engagement

## Skills

---

**Technical Skills:** Composite layup (prepreg, VARI, forged carbon fiber), 3D printing, manual milling, laser engraving, GD&T, FEA

**Design Software:** SolidWorks, Abaqus, Cura, PatternSmith/Autometrix