

Lukas Fleury

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SKILLS

- **Software Tools:** SAP, SolidWorks (CSWA), AutoCAD, AutoDesk Inventor, Mastercam, MATLAB, C++
- **Manufacturing:** Milling, Lathe, CNC, 3D Printing, Welding, Assembly
- **Core Competencies:** CAD interpretation, DFM comprehension, MS Office

WORK EXPERIENCE

Mammoet - Puslinch, Ontario | Engineering Co-op

01/2026 - 05/2026

- **Produced** and **revised 80+** fabrication drawings for crane and heavy-lift equipment using AutoCAD and AutoCRANE, improving drawing accuracy, standardization, and database integration.
- **Designed** detailed usage, assembly, and setup drawings for heavy-lift transport systems (jack-and-slide, SPMT interfaces), reducing field complexity and supporting safer, faster on-site execution.
- **Developed** project drawings to install a **150-ton** transformer at Bruce Power, and **100-ton** steam generators at Pickering Nuclear.
- **Created Excel-based automation scripts** that convert crane load configuration data into standardized, engineer-readable documents, **improving workflow efficiency by 90%**.

The Welmar Group - Guelph, Ontario | Sheet Metal Worker

06/2023 - 09/2023 and 06/2024 - 09/2024

- Installed, aligned, and secured commercial HVAC duct systems by **interpreting blueprints**, coordinating with other trades, and **adapting fabrication methods** to meet on-site conditions.

TECHNICAL PROJECTS

OYAP Student Manufacturing Projects

- **Developed, analyzed** and **incorporated** challenging multi-part manufacturing projects to the **OYAP** manufacturing technology curriculum.
- **Created** structured, industry-style designs that improved technical skills and gave **60+** students experience in interpreting advanced blueprints while performing precise machining operations.

Valvetronic-Style Dual-Exit Exhaust Conversion with Remote-Actuated Flow Control

- **Engineered a dual-exit exhaust assembly** with a custom **valvetronic-inspired flow-diverter** modeled in SolidWorks, integrating an **RF-controlled actuator** to toggle an exhaust valve for my personal vehicle.

SkillsOntario Provincial Precision Machining Competition

- Manufactured complex aluminum and steel parts under tight **time constraints** and **precision tolerances**.
- **Operated** lathe and milling machinery in a competitive and high-pressure environment.

Waterloo Rocketry Design Team

- **Designed and fabricated** propulsion hardware including fuel and oxygen injector valves and feed-system components, delivering fully functional flight-ready parts for Waterloo Rocketry.

AWARDS

- 1st Place – Waterloo Regional Precision Machining Competition | SkillsOntario
- Engineering Certificate Program (ECP) | St. Benedicts C.S.S.

EDUCATION

09/2025 - Present

University of Waterloo

Bachelor of Applied Science, Mechanical Engineering
