Priya Raghunathan

Mechanical Design Co-op | Manufacturing Engineering Co-op

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PROFESSIONAL SUMMARY

Mechanical engineering graduate with two co-op terms in product design and manufacturing support. Comfortable taking a part from SolidWorks model to fully toleranced drawing, running basic FEA, and walking the shop floor to see why a fixture does not fit. Registered with PEO as an engineering intern while working toward P.Eng.

EXPERIENCE & PROJECTS

Larkspur Fluid Controls · Mississauga, ON **Jan 2025 — Aug 2025**

Mechanical Design Co-op

- Redesigned a sheet metal valve enclosure in SolidWorks to share one bracket across three models, removing two part numbers from the bill of materials.
- Ran static FEA in ANSYS on a mounting bracket that cracked in vibration testing, recommended a thicker gusset and confirmed the fix on the next test build.
- Produced 40 detail drawings with GD&T per ASME Y14.5 and released them through the PLM system after senior engineer review.
- Built a Python script that checked drawing title blocks against the BOM, catching revision mismatches before parts went out for quote.

Halverson Agricultural Equipment · Guelph, ON **May 2024 — Aug 2024**

Manufacturing Engineering Co-op

- Designed and 3D printed a drilling fixture for a welded frame, shortening setup on the line and ending mislocated holes reported by quality.
- Documented root cause for six nonconformance reports using fishbone diagrams and shared corrective actions with the supplier quality engineer.

Capstone: Low-Cost Wheelchair Stair Climber

- Led mechanical design of a tracked stair-climbing attachment, sizing the gearmotor from load calculations and validating the frame with FEA before building a working prototype.

Formula Student Cooling System

- Sized the radiator and routed coolant lines for the team car, using MATLAB heat transfer models checked against track temperature logs.

EDUCATION

BASc, Mechanical Engineering (Co-op) **2026**

Lakeshore Polytechnic University

SKILLS

Technical: SolidWorks, AutoCAD, GD&T (ASME Y14.5), ANSYS Mechanical, MATLAB, Python, Tolerance stack-up, DFM, Sheet metal design, 3D printing, Root cause analysis, Excel

Certifications: Certified SolidWorks Associate (CSWA)