

Gregory M. Powers

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Education

Purdue University, West Lafayette, IN
B.S. Mechanical Engineering

Expected May 2028

Engineering Experience

Samtec *New Product and Additive Tooling Engineer*

Jan 2026 – Jul 2026

- Designed FDM printer chambers with ventilation, heating, and drying to address humidity-related defects; Samtec ordered three at \$3,000 each.
- Designed and ran an experiment that identified screw type as the root cause of a tooling quality issue, ruling out the suspected machine defect.
- Designed clamping fixtures for cable assembly and supported additive manufacturing designs to improve quality and reduce cost.
- Recorded measurements to 0.00001 in. with component temperature control to analyze variation against a ± 0.0001 in. tolerance target.

Mirri Diabetes *Founder*

Jan 2024 – Present

- Researched, developed, and tested insulin pump algorithms for type 1 diabetes management.
- Organized focus groups to understand user needs and gather feedback for product development.
- Managed beta testing, prioritized user-reported issues, and coordinated fixes.

Purdue University *Research Technician, Biomedical Engineering*

Feb 2025 – Present

- Validated type 1 diabetes control-system research in laboratory settings.
- Implemented a machine-learning approach for type 1 diabetes management.
- Co-authored an abstract accepted for presentation at the Diabetes Technology Meeting.

Purdue Electric Racing *Drivetrain Engineer*

2024

- Modeled drivetrain components and performed finite element analysis (FEA) to guide design decisions.
- Programmed five-axis CNC milling operations; supported manufacturing and assembly.

Leadership & Service

The Diabetes Link – Purdue Chapter *Founder & Treasurer*

2025

- Founded and led a campus organization supporting diabetes awareness and advocacy.
- Managed chapter funding and planned initiatives to improve access to diabetes services.

Technical Skills & Certification

CAD/CAE: SolidWorks, Siemens NX, Fusion 360, Autodesk Inventor (Certified User), FEA, CFD

Programming: Python, MATLAB, Swift, Java

Quality: Root-cause analysis, statistical analysis, experiment design

Measurement: Micrometers, Cadillac height gauges, drop gauges, feeler gauges, gauge block stacks

Manufacturing: Four- and five-axis CNC milling, FDM/SLA 3D printing, laser and plasma cutting

Productivity: Microsoft Office (Excel, Word, PowerPoint), Google Workspace

Awards & Honors

Purdue College of Engineering & PSEC Social Impact Award

2025

Purdue New Venture Challenge Finalist

2025