

# KARL BENZ

karlbenz@gmail.com | (481) 516-2342 | Hanover, NH | [Portfolio/GitHub/LinkedIn](#)

## EXPERIENCE

---

**Mechanical Engineer**, *Hyperion Manufacturing Solutions*, Hanover, NH May 2023 - Present

- Design and test mechanical parts and assemblies for industrial automation equipment.
- Work with manufacturing, quality, and supply-chain teams to identify issues and improve designs.
- Create models, drawings, and prototypes using SolidWorks and standard design practices.
- Prepare documentation including drawings, test plans, and design reviews.
- Support prototype builds and reliability testing to ensure products meet performance and safety goals.
- Help validate new design changes by running simple stress checks, fit checks, and functional tests.
- Help perform root-cause analysis on failed parts and recommend simple design fixes.

**Mechanical Design Engineer**, *Precision Instruments Inc.*, Hanover, NH Jun 2020 - May 2023

- Designed housings, linkages, small mechanisms, and fixtures for new products using SolidWorks.
- Improved manufacturability and assembly time by updating designs based on feedback from production and quality teams.
- Performed tolerance checks and GD&T updates to reduce assembly errors.
- Assisted with prototype builds and testing to verify design performance.
- Helped mentor junior engineers on CAD standards and drawing practices.
- Reviewed supplier feedback to spot recurring design issues and recommend simple fixes.
- Tracked design changes through the revision process to keep drawings and documentation updated.

**Entry-Level Mechanical Engineer**, *Siemens*, Hanover, NH May 2018 - Jun 2020

- Supported maintenance and troubleshooting of mechanical test equipment.
- Updated preventive maintenance procedures and documented recurring issues.
- Helped improve equipment uptime by performing inspections and identifying early failure signs.
- Worked with technicians and vendors to resolve equipment problems quickly.
- Created maintenance guides and system history logs to improve future troubleshooting.
- Assisted with small design changes for fixtures and brackets to improve durability and ease of use.
- Assisted with small fixture repairs and part replacements to keep test equipment running.

**Mechanical Engineering Intern**, *Siemens*, Hanover, NH May 2017 - May 2018

- Assisted engineers with basic design updates to mechanical components and hydraulic test fixtures.
- Updated CAD models and drawings after design changes or feedback from technicians.
- Performed testing tasks such as measuring dimensions, checking fits, and recording equipment data.
- Organized project files, build notes, and test results to help the engineering team stay aligned.
- Helped prepare material lists and simple assembly instructions for prototype builds.
- Helped assemble prototype components and confirm that parts matched drawings.

## EDUCATION

---

**BSME**, *Dartmouth College*, College of Engineering May 2018

## SKILLS

---

- **Design:** SolidWorks (CSWA), AutoCAD, Fusion 360, Creo, GD&T (ASME Y14.5), DFM/DFA, Finite Element Analysis (ANSYS, COMSOL), 3D Printing (FDM/SLA), Rapid Prototyping
- **Analysis:** MATLAB, Python (NumPy, Pandas, SciPy), LabVIEW, Minitab, JMP, Excel