Andrew Gothro

2024 171st PL SE, Bothell, Washington 98012

Andrew.gothro@comcast.net Mobile: 425-949-9292

Education

Current Junior at Gonzaga University — Graduation: May 2021

BS Major in Mechanical Engineering, Minor in Physics GPA: 3.2

Henry M Jackson High School, Mill Creek, Washington GPA: 3.68 — Graduated 6/17/17

Work History

Tethers Unlimited Engineering Intern — *June-August 2020*

- Designed and performed high-precision tests for experimental spaceflight operations.
- Produced full test report, in-depth analysis, and thorough documentation for an entire testing process.
- Updated existing tools and software to enable new kinds of manufacturing processes.
- Involved in re-qualification and improvement for proven SmallSat components.

Collins Aerospace Materials and Flammability Intern — *May-August 2019*

- Developed cure process for new composite layup process.
- Produced engineering drawings and models for multiple projects using both Solidworks and NX.
- Developed testing procedures for material qualification.
- Assisted with detailed failure mode effects analysis for interior monuments for OEM customers.

Gonzaga Machine Shop lead — *2017-2020 Academic years*

- Assist with manufacturing a wide range of parts for various clubs and senior projects. — *September 2020-present*
- Teach students of all backgrounds skills to design and create parts on their own.

Boeing High School Fabrication Summer Internship — *June-August 2016*

- Placed in the Innovation Center section of the Electrical Systems Resources Center (ESRC).
- Increased efficiency through prototyping of equipment for workers in an industrial setting.

Skills

Solidworks — 7 years' experience

- Designed parts, assemblies, and drawings for design planning and CNC machining.
- Experienced in bottom-up and top-down modeling as well as configurable parts.
- Certified Solidworks Associate

Microsoft Excel, Google Sheets — 6 years' experience

- Created robotics team scouting algorithm.
- Used VBA programming for data input automation, sorting, filtering, and results output.

Additive manufacturing — 5 years' experience

- Led a team to design and build a 5-axis FDM 3d printer, and adapt existing software to produce non-planar layers.
- Experience designing 3d printed parts for robotics competition use.
- Experienced in mechanical design specifically for optimizing parts for 3d printing

Siemens NX and Teamcenter PLM Software — 3 month's experience

- Created and managed NX parts, drawings, and associated documents through the life multiple projects

Activities

Gonzaga SAE Baja Club (Technical design president) — *2017-present*

- Led design for steering, suspension, braking, and drivetrain systems.
- Optimized component geometry for off-road racing characteristics.
- Manufactured many components using manual and CNC metalworking tools and 3d printing.

Gonzaga ASME Rocketry club — *2017-present*

- Coordinated sub-system integration as integration team lead.
- Organized component layout and configuration.
- Prototyped both fiberglass and carbon fiber composite parts' layup processes.

Boy Scouts — *2007-2017*

- Eagle Scout, June 1st, 2017.