

# Grady Conwell

Pasadena, CA | **818-928-9441** | [gradyconwell@icloud.com](mailto:gradyconwell@icloud.com) | 3.8 Cumulative GPA | [gradyconwell.com](http://gradyconwell.com)

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Mechanical and Mechatronic Engineering Major seeking an internship during Summer 2025 with a focus on design for manufacturing, hardware development, and testing.

## EDUCATION

Pasadena City College | 2023-24 | 21 Credit Hours

B.S. in Mechanical and Mechatronic Engineering | California State University: Chico

Expected Graduation: December 2027

## EXPERIENCE

2023-25 | Self Employed, boutique stationary design and machining. | <https://www.ebay.com/usr/grcon-1>

- Designed, developed, and tested turned components in a variety of metals.
- Managed e-commerce, bookkeeping and shipping for international customers in 14 countries.
- Drafted technical drawings and hired job shop to increase volume.
- Achieved **100% positive feedback** across 300+ sales and 100+ written reviews.

2021-24 | Volunteer Mentor, FIRST robotics | La Canada, California

- Collaborated closely with mentor team to instruct students from elementary and middle school weekly throughout a robotics competition season.
- Facilitated and directed regional First Lego League Explore competitions.

## ENGINEERING PROJECTS | See [gradyconwell.com](http://gradyconwell.com) for pictures and details.

2021-22 | High Speed FFF 3d Printer

- Used CAD tools, to draft and model an original design.
- Programmed machine routines using python and g codes.

2022-24 | Benchtop Aluminum Router

- Used CAD tools to develop a machine simulation and CAM post processor.

2024-Ongoing | Compact Gang-tool CNC Lathe

- Fabricated aluminum frame and mineral casting.
- Utilized FEA analysis to refine frame design.
- Engineered CNC control cabinet and drive system with AC servos, sensors and closed loop stepper motors.

2025-Ongoing | Gear Cutter Relief Tool (Society of Manufacturing Engineers, Chico State)

- Trained four students on proper use of an engine lathe, and machining fundamentals.
- Drafted complete 3D CAD and manufacturing drawings using Autodesk Fusion 360.

## SKILLS

### CAD & Parametric Modeling

- Proficient in Autodesk Fusion 360 and SolidWorks (CSWA Certified)
- Project experience with GD&T, Large Assemblies, Motion systems, Design for Manufacturing, Manufacturing Drawings. Can provide design samples.

### Programming

- Project experience with JavaScript, C++, Python and LaTeX.
- Matlab (coursework: Introduction to Technical Computing)

### Other

- Operation, Repair, and Maintenance of prosumer machines, esp. Prusa.
- In-class project experience with PLC controls, pneumatic systems.