

Sam Lombardi

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EDUCATION

The University of Arizona College of Engineering. BA, Mechanical Engineering *Class of 2019*
• Cum Laude, Cumulative GPA: 3.66
• Tau Beta Pi, Engineering Honor Society

WORK EXPERIENCE

Milwaukee Tool, Milwaukee, WI *2020-Present*
Concept Engineer

- Uncover unmet user needs, participating in local and regional field research and the user centered design process.
- Help ideate creative ways to solve the user insights, and act as the technical expert in the creation and execution of the ideas into concepts. This typically takes the form of developing rapid prototypes ranging from low fidelity to looks-like/works-like.
- Working on the leading edge of new product innovation, anything from 5 months - 5 years out.

ACCO Engineered Systems, San Leandro, CA *2018-2020*
Design Engineer

- Working on HVAC air distribution and plumbing piping layouts, building load calculations, duct and pipe pressure loss calculations, pump and fan selection submittals, and fire life control matrices.
- Leader of the design effort while working closely with project managers, trade partners, construction teams and customers on tenant improvement and new construction for Bay Area high-rises while gaining a knowledge of ASHRAE and California Codes.

Caterpillar Inc. Senior Design Project *2018-2019*
Mechanical Engineer

- Worked with a multidisciplinary engineering team on an automated electromechanical device that would measure, cut, wind, and bind lengths of wire to a specified length and quantity.
- Starting as a napkin sketch and through brainstorming, design, simulation, prototyping, testing, and manufacturing it was built and presented to a panel of industry experts.

Scientific Art Studio, Richmond, CA *2015-2017*
Rapid Prototyping & Design Intern, Studio Assistant

- Worked with a team that designs, fabricates and installs themed environments and engineered icons around the world.
- Programmed and operated a CNC mill, and SLA & FDM 3D printers independently and wrote in-depth technical manuals for these tools for use, proper care and troubleshooting for all members of the studio, saving time and increasing productivity.
- Learned firsthand skills including engineering and architectural & mechanical design, CAD, welding, concrete casting, machining, and carpentry.

PAST EXTRACURRICULARS & LEADERSHIP EXPERIENCE

Rube Goldberg Club, Vice President. University of Arizona *2015-2019*
• Worked collaboratively with an interdisciplinary team of students to design, build and compete Rube Goldberg machines.

- Helped oversee all operations of the team and increased the club's campus presence which actively improved outreach, funding, and recruitment.
- 2017-2018 National Rube Goldberg Machine Contest Legacy Award Winner.

Volunteer, Arizona Science of Baseball. University of Arizona *2015-2019*

TECHNICAL SKILLS

Product Development, Human-centered Design, Design Thinking, Front-End Innovation, Prototyping
SolidWorks, CAD/CAM, Matlab, Microsoft Office, FEA, Adobe Creative, GD&T, Mechatronics, etc.