

BRENDEN KOO

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SUMMARY

Mechanical Engineering M.S. candidate at Stanford with hands-on experience in prototyping, mechanical/CAD design, materials selection, and design for manufacturability and assembly (DFMA). I blend engineering precision with a human-centered, empathy-led design approach to create products that are intuitive, accessible, and thoughtfully engineered.

EDUCATION

Master of Science in Mechanical Engineering (Mechatronics) Apr 2023 - Dec 2026 (Expected)

Stanford University | Stanford, CA

- GPA: 3.822/4.000
- Course Assistant | CS 148: Introduction to Computer Graphics and Imaging

Bachelor of Science in Product Design Engineering Sept 2019 - June 2023

Stanford University | Stanford, CA

- GPA: 3.875/4.000
- Completed a minor in Computer Science

PROFESSIONAL EXPERIENCE

Apple, Packaging Product Design Intern March 2026 - Sept 2026

- Design and prototype fiber-based packaging solutions for a range of consumer products and accessories.
- Partner with cross-functional teams to develop packaging that meets environmental, performance, manufacturing, and brand identity requirements.
- Develop and evaluate packaging concepts through iterative prototyping, testing, and validation.

Swope Design Solutions, Mechanical Engineering Intern June 2025 - Sept 2025

- Spearheaded the Design for Manufacturing work for a CNC-turned promotional spinner, designed CAD and CAM for mass-production and reduced per-unit cycle time by 25%.
- Designed prototypes for multiple high-profile client projects — produced parts via CNC and SLA, and documented build and assembly procedures, prepping for 1,000 unit production.
- Created SolidWorks engineering drawing packages, adhering to GD&T ASME Y14.5 standards.

Buoyant Aero, Mechanical Engineering Intern Nov 2023 - Jan 2024

- Designed and iterated mechanical components using Fusion360; produced multiple iterations via FDM in a quick timeline to streamline product development process.
- Developed two working units and manufactured custom parts on manual mill and lathe.

Virtius, Product Design Intern July 2023 - Dec 2023

- Designed and implemented a landing page via Figma and Webflow, informing gymnastics fans of the Virtius company, services provided, and a teaser of the Virtius product in development.
- Developed an interactive Unity demo (C#) to highlight the Virtius user flow in context.

SKILLS

Manufacturing

FDM/SLA 3D printing, Milling, Turning, Computer Numerical Control (CNC) milling and turning

Programming and Tools

Siemens NX, SolidWorks, HSMWorks, KiCAD, Fusion360, GD&T (ASME Y14.5), Python, C++, C, C#, PyCharm, MPLAB, Unity, Visual Studio

Design Thinking

Figma, Rapid Prototyping, Design Sketching, Blender, Web Development (WordPress, Webflow), Adobe Creative Suite