

Steven Sontag

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Multidisciplinary creative technologist and educator specializing in experience and interaction design using research-driven methods and imaginative tools to create inclusive, thought-provoking experiences.

EDUCATION

Carnegie Mellon University, Pittsburgh, PA 05/2028
Master of Design in Design for Interaction

Carnegie Mellon University, Pittsburgh, PA 05/2020
Bachelor of Arts in Architecture

WORK EXPERIENCE

Scale Shop Intern, Robotics Factory at Innovation Works 05/2026 - Present

- Assisted robotics startups and resident companies with the design and fabrication of their prototypes utilizing an iterative design process and rapid prototyping tools such as 3D printers, a fiber laser cutter, and HAAS machining centers.
- Developed example projects and documentation for sheet metal prototyping workflows for enclosure, bracket, tooling, and jig design. Processes included bending, forming, punching, and welding.

Assistant Shop Director, Architecture Department of Carnegie Mellon 08/2022 - 01/2026

- Provided guidance and mentorship to students about how to proceed with academic, research and personal projects.
- Managed and trained a rotating team of student employees working in both the woodshop and digital fabrication lab who assisted students realize their ideas physically and maintained safety with dangerous equipment.
- Assisted the Shop Director and dFAB lab manager with admin tasks such as inventory management, material purchasing, and equipment maintenance.
- Participated in and led improvement projects in both facilities and around the school including automated dust collection, furniture fabrication, and training material creation.

Freelance Designer and Fabricator, Self-employed 09/2021 - Present

- Performed contract work as a digital product designer, product designer, fabricator, design consultation and more.

Industrial Designer and Project Lead, Edgewood Made LLC 05/2020 - 09/2021

- Worked directly with clients, to develop designs and drawings for client approval for products ranging from hardwood furniture with traditional joinery to custom kitchen cabinetry.
- Produced comprehensive construction drawings, ordered materials and completed CNC programming and work-holding design before the project was taken on by shop staff.

TEACHING EXPERIENCE

Adjunct Instructor, Art Department of Carnegie Mellon University 01/2026 - Present

- Taught 60-230: Intermediate Studio Digital Fabrication, a selective course in the Sculpture, Installation, and Site Work track of the School of Art's undergraduate curriculum.
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Adjunct Instructor, Architecture Department of Carnegie Mellon University 08/2022 - Present

- Taught 48-104: Shop Skills, for four academic years, a required course in the B.Arch Curriculum at Carnegie Mellon Architecture. Augmented course structure and curriculum to integrate with the design pedagogy of Poesis I, 1st year Studio.
- Developed and taught 48-112: Digital Fabrication Skills, for three academic years, a required course in the B.Arch Curriculum at Carnegie Mellon Architecture. Course contents focused on digital fabrication methods and safety.

SKILLS

Tools: Figma, Claude Code, Adobe Creative Suite, Notion, HTML/CSS/JS, Unity, CNC Routing, CNC Milling, Laser Cutting, FDM Printing, SLS Printing, SLA Printing, 6 Axis Robotic Arm Programming, Arduino Physical Computing, Robot Studio, ROS, Python, Metal Working, Wood Working.

Methods: User Research, Speculative Design, Design Fiction, Experience Prototyping, Stakeholder Mapping, Participatory Research, Narrative Design, Accessibility-Centered Design, Systems Mapping, Journey Mapping, Usability Testing, Information Architecture, Design Thinking, Systems Thinking, Stakeholder Facilitation, Ethical & Inclusive Design Practices, Cross-functional Collaboration.