

Lucas Brecher

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Designer and prototyping specialist with 7+ years of problem-solving experience in manufacturing, start-ups, and fabrication studios. I've worked each step of the production pipeline - ideation, collaborative brainstorming, DFM, prototyping, production, and everything in between. Diverse work experience complemented by my academic background in written composition, rhetorical theory and practice. Personally motivated to help anyone make just about anything.

Experience

Technical Designer & Draftsperson, 11th St. Workshop

Los Angeles, CA
Jan. 2022 - Present

- Creates detailed build drawings from Solidworks assemblies according to client specifications, prioritizing safety, manufacturability, cost, and quality.
- Tracks builds from conception to installation, considering factors that may affect their construction, transportation, and on-site assembly.
- Engages in a constant dialogue with fabricators, clients, engineers, and other stakeholders to iterate designs until all parties are fully satisfied.

Prototyping Lab Manager, 3DEO

Los Angeles, CA
Sept. 2021 - Dec. 2022

- Oversaw R&D rapid prototyping lab dedicated to improving 3DEO's metal 3D printing technology.
- Built and tested hardware prototypes, advising engineers on design decisions affecting manufacturing method, material choice, and post-processing.
- Operated fleet of prototyping hardware (3D printers, CNCs, laser cutter, shop tools) used to develop and troubleshoot new designs.

Product Engineer & Makerspace Guide, Bit Space

Chicago, IL
Mar. 2020 - Aug. 2021

- Designed and taught curricula using professional fabrication tools and techniques, 3D printers, CAD, robotics, carpentry, game design, programming, electronics, hardware-hacking, and more.

Makerspace Manager, Oberlin College

Oberlin, OH
Aug. 2017 - May 2019

- Handled all aspects of a public makerspace equipped with shop tools and hobby 3D printers, hosting open office hours, helping students plan and assemble projects across disciplines.

Education

Oberlin College, Rhetoric & New Media BA / Writing & Composition Minor

Aug. 2015 - May 2019

MIT xPro, Additive Manufacturing for Design & Production

Feb. - May 2022

Los Angeles Trade Technical College, Electronics Certification

June - Aug. 2018

Skills

Software - Solidworks, Fusion 360, Rhino 7, Adobe Illustrator & Photoshop, 3D slicer software

Hardware - FDM & SLA 3D printers, laser cutters, CNCs, Arduino, digital & analog electronics, shop tools

General - Windows + Mac OS, Microsoft Office, Google Suite, Jira, Confluence, HTML/CSS/JS