

Brian Benchoff

PROTOTYPE ENGINEER

3033 Rivera St
94116 San Francisco
☎ +1 (215) 690 1415
✉ benchoff@gmail.com
📄 <https://bbenchoff.github.io/>

Experience

Span.io

Prototype Engineer

San Francisco

2022-March 2025

Prototype work; CNC (HASS, Shapeoko), 3D Printing (Stratasys PolyJet, Filament) and others (laser cutter, fiber laser, molding/casting). Developed novel data acquisition unit for isolated thermocouple measurement. Created comprehensive data acquisition system with Flask/React web interface. Designed and fabricated specialized test rigs and prototypes using KiCad PCB design and 3D printing. Implemented V2G (Vehicle-to-Grid) home backup power solution prototype utilizing Nissan Leaf with CHAdeMO interface.

Self-Employed

Embedded Engineer, Product Designer

San Francisco

2016-2022

Designed, built, and sold consumer electronics. This included 3D CAD Fusion360, AutoCAD, PCB design Eagle, KiCAD, Design for Manufacturability and Design for Assembly. Closely integrated with PCB assembly, up to and including running pick and place machines. Fabrication of 3D printed and injection molded parts in plastic and silicone. Designed, marketed, and sold several successful products.

Supplyframe

Content Specialist

Pasadena, CA

2018-2022

Produced electronic design and engineering content, engaged with engineers regarding new products. Responsible for hardware projects, PCB & firmware design. 3D modeling, injection molded and 3D printed plastic and silicone.

Hackaday

Editor

Pasadena, CA

2011-2018

Wrote, edited, produced content for weblog Hackaday. Designed hardware products and projects.

Skills

Languages: C, C++, Python, L^AT_EX, SQL

Mechanical CAD: Fusion360, AutoCAD, OpenSCAD

Electronic CAD: Altium, Eagle, KiCAD

Embedded: I2C, SPI, Serial, Parallel interfaces, USB, USB-C, HDMI, PCIe, eMMC

Graphic: Adobe Photoshop, Illustrator, Premiere

Platforms: x86, 8085, AVR, ARM Cortex-M (M0 & M4), RP2040/2350 PIO, Linux SoCs (Microchip, Allwinner)

Misc: Microsoft Office, 3D Printing, Rapid Prototyping, Industrial Design

Embedded Linux: Buildroot, Yocto