**Lucy Moglia**

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**WORK EXPERIENCE**

**Self Employed Hardware Designer Oct. 2024 – Present** *Engineer San Francisco, CA*

* Developed a number of demos which helped secure startups funding
* Provided rapid turnaround PCB design and testing services
* Early-stage hardware consulting, assisting founders in understanding their products' technical requirements
* Lab specification and equipment recommendations, process initialization and calibration
* Performance analysis
* Failure mode analysis

**Atopile Oct. 2024 – Present** *Research Fellow San Francisco, CA*

* Developed MicroMPPT, a 5W autonomous multi-chemistry solar charger with autonomous perturb-and-observe, now distributed by a number of third-party sellers
* Developed a series of home assistant control panels
* Developed a high-altitude balloon payload with LoRa telemetry
* Testing/debugging prototype features

**Kyocera-AVX Apr. 2023 – Aug. 2024** *Research Engineering Fountain Inn, SC*

* Performed teardowns on a wide variety of products and systems on behalf of market research and engineering teams.
* Reverse-engineered systems to assist product design and market research teams; produced schematics and component models from product samples; evaluated samples and prototype components to assess suitability for given products/applications of interest.

**Machinic Garden LLC Oct. 2022 – May. 2023** *Founder/Engineer Liberty, SC*

* Designed prototype PCBs to client specifications and designed processes to address specialty needs (e.g., copper nanoparticle airbrush coating and electroplating of 3D-printed parts).
* Acquisition and integration of a wide variety of small-scale manufacturing and test equipment including 3D printers, laser cutters, arc welders, drill presses, oscilloscopes, CNC mills, and reflow ovens.
* (KiCAD, Fusion360)
* Managed a shop website and several storefronts such as Etsy and Amazon; managed AdSense; and handled order processing and shipping for an array of products including t-shirts, laser-engraved coasters/signs, 3D prints, and electronics kits.
* Full-stack Embedded Development (C/C++, MicroPython, Arduino, ATTiny, ARM Cortex-M, STM32, ESP32/8266, Teensy, RP2040, SAMD21/51)

**Electrolux May. 2022 – Oct. 2022** *Electronics Lab Technician Anderson, SC*

* Assisted engineers in PCB and firmware development and validation.
* Performed IEC/UL compliance testing, evaluated hardware and firmware revisions with LabVIEW, NI embedded PCs, and custom Arduino-based test hardware.
* Used OrCAD, LabVIEW, National Instruments PXI, and a wide array of electronics lab equipment.
* Assisted in development of EOL test fixtures

**EDUCATION**

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