



ALEXTHEGOODMAN



Hi, I'm Alex Woodman

I have been creating what I am passionate about since I was just a kid, whether that be software or books, and lately, hardware. I have a knack for the deep challenges with lots of moving parts. That's why I gravitate towards complexity.

PCB holds the key to many hardware experiences, while it is essentially the science of managing electric signals. I get a kick out of laying out components, drawing traces, creating vias, and running calculations.

I am still new to the circuit design world. Read on to learn more about my experiences.

- **Learned the basics of electrical engineering and PCB from an experienced teacher**
- **Designed multiple boards**
- **Primarily use CircuitMaker, excited to use another solution**

Email me alexthegoodman@gmail.com

Call me directly 626.491.3348



Expertise

Design & Layout

Schema design, Pin research, Component placement considering trace paths, layers for communications, power, and ground

Components

Transistors (Bipolar, MOSFET), Resistors, Capacitors (Ceramic, Electrolytic), MCUs (currently STM), Diodes, Inductors, etc

Selection

Reviewing Datasheets, reading charts and specifications, considering their ability to work together in one functional system



Experience

Full Stack Engineer

AlexTheGoodman - *Jan 2013 - July 2024*

I got my professional start about 10 years ago by working directly with clients. I also held a number of full-time or in-office positions in that time. Mostly I got TypeScript and Python work via contracting, while Rust and C++ are featured on my own GitHub.

Responsibilities

- Research and collect business information related to the challenge at hand
- Develop specifications and estimations for projects
- Establish technical plans and coordinate contractors as-needed
- Implement verifiable quality assurance controls
- Deliver projects which meet or exceed scope requirements
- Provide long-term support mechanisms and procedures



Initial Projects

- Automated Coffee Maker - this PCB uses an STM-32 MCU to control a small motor, hot plate, low-energy water drip-pump, and a heating element for the water itself. The motor is used with a rotary valve for dispensing coffee grounds.
- Touchpad Remote - Uses a simple STM-8 MCU and rechargeable battery with USB-C to manage between an IR emitter, 4 button switches, and the touchpad.

Learn More

Portfolio: AlexTheGoodman.com

Twitter: @AlexTheGoodman

GitHub: [AlexTheGoodman](https://github.com/AlexTheGoodman)

Facebook: [AlexTheGoodman](https://www.facebook.com/AlexTheGoodman)

Connect

Email: alexthegoodman@gmail.com

Phone: 626.491.3348