100 Norwich Street #310
Charlottesville, VA 22903

Samuel Korn

korn94sam@gmail.com
(720) 333-4371

Education

University of Colorado at Boulder Graduated May 2016

- Electrical and Computer Engineering Major with Computer Science Minor

Engineering Experience

Canvas Technology: Electrical Engineer Summer 2016 - Summer 2017

- Design ownership of 3 PCB projects, which included differential (CAN) signal routing, buck converter circuits, analog/signal conditioning, and BLDC motor control.
- Ensured functionality of 36V LiFePO4 battery and battery management system, and worked closely with manufacturers to diagnose issues.
- Continually improved with the team for over 20 different prototype builds, and ensured the devices remained functional for software development.
- Worked to build up a suite of test software to ensure quality of the hardware builds, and supported the development of test fixtures.

Tri-State Fireworks: PCB Designer Spring 2015 - Winter 2015

- Worked to build a system to validate a novel fireworks launch system, using custom ARM PCBs.
- Implemented circuitry to monitor and record 576 high-speed signals concurrently.

ClearCorp: PCB Design and Test May 2014 - October 2014

- Primary designer for a new hardware revision of *FlocCounter* water treatment sensor, using Eagle PCB.
- Debugged, refurbished and assembled SMD PCBs to be sent to municipal water utility customers.

Projects

Power Inventor: IoT Outlet Controller Summer 2014 - Present

- Developed a mobile-friendly Web Application, hosted on a Raspberry Pi, using Python and Javascript/jQuery.
- In beginning phases of scaling an improved design to 5-10 units.
- **Web Interface:** http://powerinventor.ddns.net **HackADay:**http://bit.ly/22Gn4UP

Senior Projects: Modular Drag-And-Drop Robot Fall 2015 - Spring 2016

- Part of multidisciplinary team to build a robot programmed with a drag-and-drop programming language.
- Hardware Designer of 4 modules, including 5V Buck Converter, Motor Drivers, LED, and User Interaction.

CatalyzeCU: Laser Tattoo Removal Robot Summer 2015

- Part of a competitive start-up accelerator with $4000 in grant money at CU Boulder.
- Received mentorship in product design, finances, ideation, and giving an interesting product pitch.

Skills

- **Programming Languages:** C; C++; Python; Javascript; Assembly; Java; LaTeX; MATLAB; Excel.
- **Computer Skills:** Comfortable in Linux terminal environments, Git, and the assembly of computers.
- **PCB Layout Experience:** Altium Designer, Eagle PCB, PCB Artist.
- **3D Modeling:** Solidworks experience and 3D printing on LulzBot and MakerBot 3D printers.