

Emma Blatt · Systems Design Engineering

elblatt@edu.uwaterloo.ca · emmablatt.com

Skills

PCB design experience with DipTrace and KiCad. Skilled at prototyping, bring-up, sourcing components, circuit assembly and soldering.

Trained with lab measurement equipment (oscilloscope, function generator, multimeters).

Hands-on experience with machine shop tools (lathe, mill, drill press).

Proficient in Python, C++, and MATLAB.

Experience

UW Robotics Team · Electrical Team Member · Sept 2017 to present

Designed schematics and PCB layouts for end effector board in DipTrace to prepare for the University Rover Challenge. Functionality includes: CAN, SWD, I²C, limit switch control, encoder for motor.

Performed EMI testing on robot arm to determine if wires should be shielded to mitigate interference between PWM and communication signals.

TD Lab · Product Design Intern · Sept 2017 to Dec 2017

Led a small team of designers, developers, and data scientists to develop an artificially intelligent solution to a financial problem. Independently conducted 15 user interviews and user testing sessions to ensure that solution met the user requirements and specifications.

Drop · Junior Software Developer · Jan 2017 to Apr 2017

Solved over 4000 customer support tickets. Utilized knowledge gained to design and develop an app feature in React Native which has reduced the overall number of customer support tickets by 10%.

Education

University of Waterloo · 2A Systems Design Engineering

Relevant courses: Digital Systems, Electromagnetism and Optics, Materials Chemistry, Digital Computation (C++), Human Factors in Design (human-computer interfaces).