

Emma Blatt

emmablatt.com

Experience

Apple Inc.

iPhone System Integration EE SEPT 2020 - DEC 2020

- ✦ Validated prototype design of ambient light sensor module and **led flex PCB revision** to mitigate power supply noise.
- ✦ Developed **MATLAB tool** to reduce manual testing for algorithm selection, optimizing power consumption and user experience.
- ✦ Verified that **power integrity for NAND chip** met specifications using HSPICE, PowerDC, and PowerSI.

iPhone System Integration EE SEPT 2019 - APR 2020

- ✦ **EE integration of camera sensor** including system validation and debugging electrical issues cross-functionally with other teams.
- ✦ Validated gas gauge, charge profile, and **battery protection circuitry**.
- ✦ **Measured wireless charging efficiency** and documented charging architectures of competitor devices in comparison to iPhone.

Nytrix Inc.

Product Design Intern MAY 2018 - AUG 2018

- ✦ **Created schematics and PCB layouts** for 31.5" infrared-based multi touch frame with mixed signal PCB layout using Altium.
- ✦ Designed and simulated a fixed dead-time, **discrete synchronous switching regulator** which **improved full-load efficiency by 10%**.

UW Robotics Team - Mars Rover

Electrical Sub-team Co-Lead MAY 2018 - AUG 2019

- ✦ **Managed 15+ people** to design and assemble electrical systems for the University Rover Challenge.
- ✦ Designed schematics + PCBs for rover controller boards in Diptrace.
- ✦ Prepared workshop and **taught 35+ attendees** about the basics of schematic capture, SPICE simulation, and PCB layout.

TD Bank Innovation Lab

Product Design Intern SEPT 2017 - DEC 2017

- ✦ Designed experimental app to address issues with bill payment, and **conducted 15+ user interviews** to validate prototype.

Drop Technologies Inc.

Junior Software Developer JAN 2017 - APR 2017

- ✦ Independently **designed and implemented app feature** that reduced the total number of support tickets by 10%.

About Me

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(416)-918-7730

I'm a 4th year electrical engineering student who is passionate about electronic design, sensor integration, and power systems.

Looking for a 4-month internship from Sept 2021 to Dec 2021.

Skills

Design

Altium, Cadence Allegro
Analog/digital circuit design
Prototyping + bring-up
Component sourcing
Skilled with I2C, SPI, CAN

Simulation

ADS, LTSPICE, HSPICE,
PowerDC, PowerSI
PCB layout extraction

Lab

Debug + failure analysis
Soldering + PCB assembly
Power + signal integrity,
spectrum analysis, jitter,
timing measurements

Languages

Python + MATLAB Scripting
Familiar with Verilog, C, C++

Education

University of Waterloo
Candidate for B.A.Sc in
Electrical Engineering
Graduate MAY 2022