

# Andrew McMullin

 mcmullinboy15 •  andrew-mcmullin •  mcmullin.app

mcmullinand@gmail.com

801-897-3786

## EDUCATION

### Masters in Computer Science and Engineering

Aug 2021 - (December 2022)

#### UNIVERSITY OF MICHIGAN

- AI/ML and Parallel Computing, have advanced my understanding of python and computer systems.

### Bachelor's in Computer Science & Minor in Math

Aug 2019 - May 2021

#### UTAH STATE UNIVERSITY (GPA: 3.9 / 4.0)

- AWS Cloud Computing covered all AWS services to pass the AWS practitioners exam.

## EXPERIENCE

### APPLE

#### Software Engineer (Intern)

May 2022 - Aug 2022

- Replaced 10 year old **Hardware Tech. Compiled Memory** website. In production in 3 months.
- Focused on maintainability for easiest possible future updates (Docker, CI/CD, Class arch., unit/e2e tests).
- Django backend, with Redis queue to communicate with Apple Compute queue. Built with Docker.

### OPTIMA POWERWARE

#### Web-based Controls Engineer (Intern)

July 2021 - Aug 2021

- Developed and strategically designed controls for Goldmines to use ML models.
- Fixed Django templates and design, rebuilt to use Django API REST framework and React, for scalability.

### EZSALT (Startup)

#### Co-Founder and Lead Developer

Nov 2019 - July 2021

- EZsalt sells devices for monitoring Water Softener salt levels on your phone. Built all software.
- Supports over 300+ users, without failures. Scaleable to thousands of new customers.
- Managed 3-4 new versions (Github), from django on AWS EC2, to Vue/Flutter/Express.js on Firebase.
- 4+ Cloud Functions for new users, messages, etc ([mcmullin.app/ezsalt](https://mcmullin.app/ezsalt)). 12+ other API endpoints.

### OPTIMA POWERWARE

#### Data Controls Engineer (Intern)

May 2020 - Aug 2020

- Predicted Goldmine output quality, using **Pytorch Neural Networks**. Ready for production in 3 months.
- Analyzed and Tested many Neural Network configurations, (3-5 Linear Layers, 8-16 inputs to 1-2 outputs)
- Preprocessed 20,000 data entries, and eliminated manual sampling every 4 hours.

## FREELANCE

### Full-Stack Web Developer

June 2021 - present

- PSE: Reduced employee workload by computing Finances/Budgets with simple classes and a Flask API.
- Builders without Borders of Utah (nonprofit): New webpage ([formal.bwbutah.org](https://formal.bwbutah.org), [elegant.bwbutah.org](https://elegant.bwbutah.org))

## SKILLS

- |                    |                               |                 |                                     |
|--------------------|-------------------------------|-----------------|-------------------------------------|
| • Python(Adv):     | Numpy/Pandas, Pytorch         | • Google Cloud: | VM, Functions, Firebase, gcloud     |
| • JavaScript(Adv): | Vue, React, Node              | • AWS:          | Grad. Course on All Products        |
| • JAVA/C++:        | Cuda, MPI, OpenMP, LLVM       | • Tools:        | Docker, Linux, Django, Flask, Redis |
| • UI/UX:           | Figma, HTML, CSS, Material-UI | • Eagle Scout,  | the Tagalog Language                |