I have an MS in Mathematics, and am working full-time at Intel. I plan to remain at Intel until Sept 2026, and will then consider my career options moving forward: whether to

continue with Intel, to pursue a Ph.D., or to seek employment elsewhere.

## **Education**

Mathematics BS with CS minor Magna cum laude 04/2020 - 3.99/4.0 GPA Brigham Young University

Mathematics MS Graduation 08/2022 - 3.70/4.0 GPA Brigham Young University

- Algebraic and Point-set Topology

- Abstract Algebra

- Discrete Mathematics

- Algorithm design and analysis

- Data structures

Web programming and REST APIs

# **Experience**

### **Design Modeling Software Research Engineer** Sept 2022-Present

Intel Corporation

- Modeled semiconductor design rules using a proprietary geometry modeling language to improve process health
- Prepared models collaterals for publishing and made them available to partner teams

#### **Software Developer** *Aug 2019-March 2022; May 2024-Present*

LZTek

Golang

- Constructed large scale apps and graphical reports within the Quickbase database service to provide real time logistical data for internal use and client convenience
- Completed one-off programming projects for clients

### CTO, CFO Sept 2021-Present

Connex Arms LLC

- I managed all finance, technology, and legal affairs at a small arms business I started with my brother to keep the business running

# **Skills and Technologies**

Golang (Intermediate)C++ (Beginner)

Bash (Intermediate)Java (Beginner)

Git version control
Mathematical proof

· Python (Advanced)

- HTML, CSS, Javascript

- Spanish Language

# **Projects**

Master's Thesis (<a href="https://scholarsarchive.byu.edu/etd/9711/">https://scholarsarchive.byu.edu/etd/9711/</a>)

Algebraic and Wild Topology

I prove that under a natural topology, the fundamental group of a 1-D or planar Peano continuum is a topological group if and only if the space is semilocally simply connected

**WebGrader** (not public on github; deployed at <u>acmelab.byu.edu</u>)

Python, Docker & Full Stack Development

A full-stack, secure grading environment for discrete mathematics programming labs scripturetool (https://github.com/es3649/scripturetool)

A command line application written in Go to access scripture verses by reference