# **TIMOTHY J SCHOLTZ**

## **Computer Engineering Student**

Buffalo, NY

https://t-scholtz.github.io/

@ tjscholt@buffalo.edu

A creative and diligent computer engineering student, who is self motivated and good at problem solving. Passionate about software and system architecture.

## **EXPERIENCES**

#### Research Assistant

#### University at Buffalo - Prof. Weihang Wang

- January 2022 December 2022 Buffalo, NY
- Worked on a C to WebAssembly compilation, research paper. The paper was interested in finding faults that can occur during compilation, and offering solutions to such issues.
- Constructed an automated testing tool, which would take a collection
  of tests, run them in in both C and WebAssembly, and flag tests which
  produced different output between C and WebAssembly
- Help with writing and editing the research paper

The experience gave me a better understanding of the research experience, as well as introduce me to new concepts such as differential testing, WebAssembly, and how to write research papers.

#### Internship

#### **Gravatronics**

**i** January 2021 - March 2021

Johannesburg, ZA

- Created consumer documentation for one of their main products, the A.T.U. (Advanced Translator Unit) v3, which enables communication between the R5485 lithium battery and an inverter equipped with CAN-Bus communication protocol.
- Help constructing Battery Management System prototypes, which included soldering, reading circuit diagrams, and assembling enclosures.
- Created automated software that converted data from a circuit designing program, to a format that could read by their pick-and-place machine.

The experience gave me insight into the hardware side of the technology industry, and gave me hands on experience with working with physical prototypes

## **EDUCATION**

# Computer Engineering

## **University at Buffalo**

Start date:2021

**Expected Graduation date: 2025** 

**GPA: 3.9** 

I am a member of the University's Honours College. I have taken courses on the theory and implementation of data structures, as well as the design of computer memory management.

### **High School**

### **Redhill School - South Africa**

Matriculated December 2020

Graduated with 6 Distinctions SAT Score - | Math : 750 | Eng : 680 | in www.linkedin.com/in/t-j-scholtz

🗘 t-scholtz

## **ACHIEVEMENTS**

- Placed in the Top 50 in the South African Science Olympiad
- Place in the Top 1% in the South African Mathematics National Benchmark Test
- Julia Martin Trophy for Music, for musical excellence and leadership

## **COMMUNITY SERVICE**

#### STEM Field Trips

Voltured to help run UB's hosted STEM field trips, which introduced K to 8th graders from disadvantaged communities to potential Stem career opportunity's.

Pride Service Day

Worked with other volunteers doing activities aimed at cleaning and improving the UB community

SOS Children's Village renovation:

I was part of a group that helped renovate 4 of the housing units at the orphanage over the course of a week.

**Ark animal Shelter:** 

Ark animal Shelter is a no-kill dog shelter. Over the course of two weeks, I helped with caring for the dogs

Junior Council Mandela Day Celebrations

A charity event aimed at helping working mothers from poorer communities in South Africa.

## **HOBBIES**

Reading

Music

Hiking

Board games

# **STRENGTHS**

Analytical mind

Dependability

Problem Solving

Eye for Detail

# **LANGUAGES**

#### Programming Languages:

- Python
- (
- JavaScript
- Java
- Scala