TIMOTHY J SCHOLTZ

Computer Engineering Student

@ tjscholt@buffalo.edu

in www.linkedin.com/in/t-j-scholtz

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A creative and diligent computer engineering student who is self motivated and good at problem solving. Passionate about software, robotics, and expanding my skill set.

EXPERIENCE

Research Assistant

University at Buffalo - Prof. Weihang Wang

- 苗 January 2022 December 2022 📋 Buffalo, NY
- I worked on a C to WebAssembly compilation research paper, with particular interest in finding error and potential faults that can occur in this process.
- Constructed automated testing software to run a series of test code, and flag tests which produced different output between C and WebAssembly
- Help write and edit research paper
- The experience gave me a better understanding of the research experience, as well as introduce me to new concepts such as differenetial testing and wasm

Internship

Gravatronics

January 2021 – March

i Johannesburg, ZA

- Created Documentation for one of their main products, the A.T.U. (Advanced Translator Unit) v3, that enables communication between the R5485 lithium battery and an inverter equipped with CANBus communication protocol.
- Help constructing Battery Management System prototypes, which included soldering, reading circuit diagrams, and building enclosures.
- Created automated software that took data from a circuit designing program and converted it to a format that could read by their pick-and-place machine.
- Collected data relating to their production line output rates, and manufacturing times.

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 |

EXTRACURRICULAR

Buffalo, NY

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
- Computer Talent Search Senior Division
- Gold Certificate
- Gold medal in the 2020 Information Technology Olympiad (Top 7% in South Africa)
- 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 the world of stem, and potential career opportunity's in it. Pride Service Day

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

Ark animal Shelter:

Ark animal Shelter is a no-kill dog shelter. Over the course of two weeks, I helped with cleaning dog cages, and with walking the dogs.

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.

Junior Council Mandela Day Celebrations
I performed at this charity event aimed at helping working mothers from poorer communities in South Africa.

STRENGTHS

Analytical mind

Dependability

Problem Solving

Eye for Detail

PROJECTS

LANGUAGES

- Orchestra Lead Viola
- Redhill Rock Band
- Sea Scouts PL for 3 years
- Debating Second Division Team

English



Afrikaans



Programming Languages:

- Python
- C
- JavaScript
- Java
- Scala