TIMOTHY J SCHOLTZ

Computer Engineering Student

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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

📅 January 2022 – December 2022   📍 Buffalo, NY

- I worked on C to WebAssembly compilation, 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   📍 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 Honours College

High School
Redhill School - South Africa

📅 Matriculated December 2020

Graduated with 6 Distinctions
SAT Score - | Math : 750 | Eng : 680 |

EXTRACURRICULAR

- Orchestra - Lead Viola

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

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

English

Afrikaans

Programming Languages:
- Python
- C
- JavaScript
- Java
- Scala