

Skills

C++

Soldering & Circuit Assembly

Autodesk Fusion 360

Python

Circuit Design

EasyEDA

KiCad

Interests
Swimming

Aviation

3D Printing

Virtual Reality

NSRI Crew Volunteer

Griffin Trace

Electrical And Computer Engineering Student

@ trcgri001@myuct.ac.za

Summary

I am a fast learner who loves a challenge and finding innovative solutions to problems. I am passionate about computers, programming, and designing electronics. I'm currently at UCT, in my fourth year of Electrical and Computer Engineering, having received the class medal for the highest GPA in my third year.

Experience

Multotec

Jan - March 2025(Part Time)

Intern

https://www.multotec.com/

- Designed and tested an energy-harvesting PCB to power an ESP32 sensor using a stepper motor.
- Developed circuits with buck converters and battery management ICs; handled full KiCad design and JLCPCB manufacturing.
- Debugged and fixed PCB schematics to meet new requirements for voltage supervision and system resets.

Flying Robot June 2024

Internships

https://flyingrobot.co/

- Upgraded a CNC machine by designing and installing an underwater cutting system and filter to reduce carbon fibre dust.
- Designed and manufactured custom clamps and performed machine maintenance.
- Assisted in prototyping and testing a commercial power supply, gaining experience in SMD assembly and product validation.

Seven Labs July 2022

Internships

https://sevenlabs.co.za/services/

- Gained experience in PCB review, impedance matching, and 3D design (Fusion 360) for hardware mounts.
- Updated legacy KiCad plugins and built an ESP32 sensor prototype with Telegram API notifications.
- Assisted in configuring enterprise network equipment for redundancy.

3DSA 2017- Current

Owner

https://3dsa.co.za/

At the beginning of grade 8 I started my own business called GriffHub 3D Printing. Later renamed <u>3DSA.co.za</u>. I have managed this business for over seven years, and I have gained great experience in customer relations, business, 3D design and modelling, programming, and of course 3D printing.

Education

University of Cape Town

2022 - Current

BSC Electrical and Computer Engineering

2024:

Class Award: Electrical & Computer Eng Third Year

Deans Merit List

GPA: 79

2023:

Deans Merit List

GPA: 79

2022:

Deans Merit List

GPA: 80

Greenside High School

2017-2022

Matriculated with 6 distinctions

Deputy Head Boy

Swimming Captain

Sound and Lighting Captain