

WILLEM CORNELIS ROSSOUW

Final Year E&E Engineering Student

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Stellenbosch



An enthusiastic student engineer passionate about microcontrollers and all things Internet of Things

WORDS TO LIVE BY

"When you want to know how things really work, study them when they're coming apart."

-William Gibson, Zero History

PROJECTS

ESP8266 PWM and WS2812B integrated control

Personal project

Integrated 25kHz PWM control and fan selection along with ws2812b lights into the ESP8266 microcontroller for a computer during lock-down. Completed project has integration with Home Assistant and website control.

Java and C Emulation of Space Invaders

Course content

As part of a CS module, an emulation of the original space invaders was coded in Java, and then ported for C in another module, to run on an ARM microcontroller.

Reverse engineering and Design

Booyesen

Reverse engineered PurpleAir sensors and created and printed safer enclosures for long term use.

LiFePO4 Battery System Design

Kookwater

Design and implementation of a small UPS solution to provide longer lasting backup power to various devices.

Development of an air-quality solution for taxis and taxi ranks

Final Year Thesis

Development of standalone sensor modules and sensor network with local and off-site data storage.

STRENGTHS

Hard-working

Eye for detail

C/C++

Embedded Systems

Java

LANGUAGES

English



Afrikaans



EDUCATION

High School

Huguenot High School

2014 - 2018

Wellington

Academic Honorary colours

First team Hockey

BEng E&E

Stellenbosch University

2019 - 2023

Golden Key Society - 2020

INTERESTS

</> Microcontroller System Design

Integration

Automation

REFEREES

Prof. MJ Booyesen (Thinus)

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