## WILLEM CORNELIS ROSSOUW

## Final Year E&E Engineering Student

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nssassassin

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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."

nssassassin.github.io

-William Gibson, Zero History

## **PROJECTS**

#### ESP8266 PWM and WS2812B integrated control

#### Personal project

Integrated 25kHz PWM fan control and selection with ws2812b lighting and effects with the ESP8266 microcontroller. Completed project has integration with Home Assistant and local 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.

# 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.

### **ACHIEVEMENTS**



**Golden Key Society** 

Membership Acquired in 2020



Proxime Accessit in high school

Achieved an average of 86.2% in the NSC Examinations.

### **STRENGTHS**

Hard-working

Eve for detail

**Embedded Systems** 

C/C++

HTML

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 - Current** 

## **INTERESTS**

Microcontroller System Design

Integration

Automation

#### REFEREES

#### Prof. MJ Booysen (Thinus)

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