

# Eusebius Mujuni Ngemera

Imperial College CID: 00825003

<https://about.me/eusebius>

(GitHub and LinkedIn)

## Education

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**Imperial College London, MEng Electrical & Electronic Engineering** — currently 2:1

**2013-17**

- Second year improved over first year, moved up by 10% in class ranking; Algorithms & Data Structures (93%)
- Third-year modules: Control Engineering, Digital Signal Processing, Artificial Intelligence, Digital System Design

**Herschel Grammar School** — A\*AAA

**2011-13**

- Mathematics (A\*), Further Maths, Physics and Chemistry

**Beechwood School, Slough**

**2007-11**

- GCSEs: 6 grade A\*-C, including Maths (A\*), Science (A\*) and English
- BTECs: 6 grade Distinction\*

## Technical Experience

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- Accelerated a software function with hardware by implementing CORDIC algorithm in **Verilog** on an **FPGA**
- Multi-signal frequency counter on **mbed** microcontroller (intermediate)
- **Python** web crawler & page-ranked search engine (intermediate)
- **Android** Development — built a weather app, used **JSON** querying (Java novice)

**USB Oscilloscope:** Facebook London Hackathon 2016

- Worked in a team of 3 to produce, in less than 20 hours, an oscilloscope desktop program and accompanying web app which display time-domain and frequency-domain (FFT) views of an ADC's input signal.

**Technical Consulting for a specialised Asset Tracker:** Group project

**May-June 2016**

- As technical leader, I have set the team's direction to implement and perfect the system
- Work has involved **node.js** on Tessel, an **Arduino** system, as well as close contact with the client

**Speech Enhancement:** Third-year Real-Time Digital Signal Processing project

**Jan-Mar 2016**

- Performed successful noise reduction from speech using frame processing on a TI DSP Starter Kit (**DSK**).

**The Prudent Buggy:** Second-year group project

**2014-15**

- Developed a working, automatic, electronic braking system for infant buggies, with Bluetooth communication (via an Arduino) between handlebar sensors and brakes. I was responsible for the braking subsystem.

## Work Experience

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**Production Team Volunteer** — Holy Trinity Brompton, London

**Mar 2016 - present**

- I have been involved as director, vision mixer, song-words and camera operator.
- Developed my ability to communicate and work well under pressure during live Sunday services.

**Part-time Sales Assistant** — Sports Direct International, Slough

**Sep 2014 - Apr 2015**

- Demonstrated my ability to adapt, with supervisor's feedback: "quick learner"

**Maintenance Technician** — Cardinal Clinic, Windsor

**Jun 2010**

- Developed effective communication in a work environment as part of the maintenance team

## Extra-Curricular Activities

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### Career

- Awarded IET Diamond Jubilee Scholarship, to be an ambassador for the IET and engineering
- Google Codestar — developed key programming skills during the summer of 2015 through hands-on learning
- Gold Certificate in the 2011 UK Senior Mathematical Challenge

### Societies

- Imperial College Kenyan Society, outgoing treasurer and incoming president