Eusebius Mujuni Ngemera

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Education

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: Artificial Intelligence, Real-Time Digital Signal Processing (79%), Digital System Design (76%)

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*

Work Experience

Python Back-end Developer — YesWeStock, London **Jul-Sep 2016**
- Working at a small startup has lead to a breadth and depth of skills learnt.
- In charge of a **Python** Flask web app along with Amazon Web Services.
- Designed new **RESTful** APIs to facilitate mobile apps.

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.

Technical Projects

Eusebius.Tech: technology blog
- A Jekyll static website with high-quality content aimed at software developers and engineers.

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.

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

Awards & Responsibilities

Awards
- IET Diamond Jubilee Scholarship
- Gold in the 2011 UK Senior Mathematical Challenge

Societies
- Imperial College Kenyan Society, outgoing treasurer and incoming president