## Eusebius Mujuni Ngemera

me@eusebius.tech http://eusebius.tech

### Education

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

2013-2017

- Second year: moved up by 10% in class ranking; Algorithms & Data Structures (93%).
- Third year: Artificial Intelligence, Real-Time Digital Signal Processing, Digital System Design, French Level 2.
- Fourth year: High-Performance Computing for Engineers, Embedded Systems, Advanced Computer Architecture, Optimisation, Pattern Recognition, Power System Economics, Strategic Management.
- Final-Year Individual Project [70%]: "Fused Arithmetic Analysis for Efficient Hardware Datapath" has involved building upon the open-source Python project "Structural Optimisation of Arithmetic Programs".

## Herschel Grammar School, Slough — A\*AAA

2011-2013

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

# **Beechwood School**, Slough

2007-2011

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

## **Work Experience**

## Python Back-end Developer — YesWeStock, London

Jul-Sep 2016

- As the only back-end developer, I added 2 grand features that increased user signup rate by 20%.
- Also developed the front-end, using Facebook's **React** to incorporate aforementioned new features.
- In charge of improving and maintaining the core Python Flask web app along with Amazon Web Services.
- Designed and documented new **RESTful** APIs in partnership with the internal, mobile app team.

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

Mar 2016-present

Developed my ability to communicate and work well under pressure during live Sunday services of over 400. Seasonal Technical Assistant — Computers 4 Africa, Maidstone 2007-present

Involved with refreshing donated PCs for schools in developing countries, and awareness presentations.

# **Technical Projects**

http://eusebius.tech/projects

**Eusebius.Tech**: technology blog

Jul 2016-present

- High-quality articles for the general public attracting over 200 monthly, unique viewers.
- Open-source projects for developers such as client-side, website social login demos using lavaScript SDKs.

**Crypto-Key**: Internet-of-Things (IoT) microPython Embedded System [A+]

Feb 2017

• Random-number and random-password generator using a Geiger (radioactivity) counter.

#### High-Performance Computing for Engineers: Fourth-year coursework module

Oct-Dec 2016

- Learned to accelerate C++ programs by parallelising using TBB as well as openCL to be run on a GPU.
- Demonstrated effective use and understanding of **Linux**, test scripts, git and Amazon Web Services.
- Produced technical reports that included code analysis and performance evaluations.

#### **USB Oscilloscope**: Facebook London Hackathon 2016

Mar 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

Technical Consulting for a specialised Asset Tracker: Group project; technical leader [A] Speech Enhancement: Third-year Real-Time Digital Signal Processing project on a TI DSK [A] **Android** Development—built a weather app as part of 6-week Android Boot Camp (Java novice) May-June 2016 Ian-Mar 2016

Feb-Mar 2015

## **Awards & Responsibilities**

## Awards

- 2013–2017 IET Diamond Jubilee Scholarship, awarded to less than 400 engineering students nationwide.
- Gold in the 2011 UK Senior Mathematical Challenge; advanced to the Olympiad of 1,000 students nationwide.

#### **Societies**

ICU East African Society 2016–17 President. Collaborating with other universities for bigger events.