

# Eusebius Mujuni Ngemera

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<http://eusebius.tech>

## Education

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

## Technical Projects

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**Eusebius.Tech:** technology blog

- A new website with high-quality content for the wider public, attracting over 200 monthly, unique viewers.

**High-Performance Computing:** 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

- 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; technical leader [A] **May–June 2016**

**Speech Enhancement:** Third-year Real-Time Digital Signal Processing project on a TI DSK [79%] **Jan–Mar 2016**

**Hardware-accelerated Computations:** Third-year Digital System Design project on an FPGA [76%] **Jan–Mar 2016**

**Android Development**—built a weather app as part of 6-week Android Boot Camp (Java novice) **Feb–Mar 2015**

## Work Experience

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**Python Back-end Developer** — **YesWeStock**, London **Jul–Sep 2016**

- As the sole 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.

## Awards & Responsibilities

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### 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.