

# Eusebius Mujuni Ngemera

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<http://eusebius.tech>

## 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

- Learnt to accelerate **C++** programs by parallelising using TBB as well as **openCL** to be run on a GPU.
- Demonstrated effective use of 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

**The Prudent Buggy:** Second-year group project [A]

2014-15

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

Feb-Mar 2015

## 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: Artificial Intelligence, Real-Time Digital Signal Processing, Digital System Design
- Fourth year: Pattern Recognition, Embedded Systems, Advanced Computer Architecture, Power System Economics, High Performance Computing for Engineers, Strategic Management (Business School)
- Final-Year Individual Project: improving open-source project "Structural Optimisation of Arithmetic Programs"

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

2011-13

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

**Beechwood School, Slough**

2007-11

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

## 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

- 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 of over 400.

## 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

- Imperial College East African Society president. Collaborating with other universities for bigger social events.