Eusebius Mujuni Ngemera

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Technical Projects

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 a variety of software by parallelising using TBB as well as **openCL** to be run on a GPU.
- Demonstrated effective use of and understanding of **bash**, 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]

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

Hardware-accelerated Computations: Third-year Digital System Design project on an FPGA [76%]

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

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

May-June 2016

Jan-Mar 2016

2014-15

Feb-Mar 2015

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, 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 — 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

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

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.