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### University of Oxford, St. Hilda's College - MPhys Physics

2019 - 2023

- 70% second year average
- St. Hilda's College Scholarship in Physics (academic scholarship based on performance)
- Crankstart Scholar (widening participation scholarship based on household income)
- Apollo Scholar (widening participation scholarship based on academic performance)

- Peer Supporter (Trained student welfare role)

2021 - Present

d'Overbroeck's Sixth Form

2016 - 2018

- 5 A Levels: Maths - A\*, Further Maths - A\*, Economics - A\*, Physics - A\*, French - B

#### **Oulder Hill Community School**

2016

- 11 GCSEs A\*-A including English, Maths, and Science

#### **EXPERIENCE**

### Jinja Education Trust (Research Intern)

Jun 2021

- Researched climate education resources and methods for use with schoolchildren in rural environments
- Identified and evaluated potential NGO funding sources for educational projects
- Provided outlne of steps required to incorporate practical skills in education, as well as skills needed for educators

# Pupil Misconceptions: Circuits & Voltage (Report author)

Jan 2021 - Apr 2021

- Conducted research into electrical misconceptions using 2 secondary school physics cohorts
- Evaluated existing teaching against further educational research in electronics
- Identified key areas in which pupils struggle in dealing with circuits
- Provided reccomendations to partner school to bolster their GCSE physics programme

## The Brilliant Club (Charity and Development Intern)

Dec 2020

- Aided the design of a maths program based upon cartesian geometry for secondary students
- Designed and recorded a physics presentation based on heat engines targeted at A level students
- Reviewed diversity provisioning and made reccomendations for more inclusive operations

## OxFizz (Widening Participation Intern)

Aug 2020

- Created a month long research report on barriers for disadvantaged Oxbridge applicants with 2 other interns
- Conducted research through provider interviews and student questionnaires distributed to  $\sim$  500 students
- Investigated existing access provisioning and identified lacks therein, presenting these gaps graphically
- Provided reccomendations for future access support programmes, bearing in mind resource constraints
- Outlined and began development of a long-term student roadmap resource for Oxbridge applications

### Kids Club Kampala (Research Intern)

Jun 2020

- Analysed an existing off-grid ~ 640W PV system in for bottlenecks in hardware
- Identified hardware limitations of (lead-acid) batteries and charge controllers in the current setup
- Researched power solutions for existing and future needs, requiring up to  $\sim 2,500$ Wh daily
- Liased with local organisations to determine possible training and funding for the project

# Citizens Advice (Campaigns and Research Intern)

Apr 2020

- Decomposed regional client profile trends (~ 6,000 entries) using spreadsheet software and Python
- Identified at-risk client demographics over a 6 month dataset
- Analysed the impact of COVID-19 on service usage
- Presented reports based on research to be used in targeting specific demographics of userbase

### **Cropper** (Developer)

Summer 2019 - Present

- Created terminal program for \*nix systems to edit media files
- Maintain Cropper in the Arch Linux User Repository
- Extended skills to develop various utility scripts such as bulk renaming

## British Heart Foundation, Oxford (Volunteer)

Aug 2018 - Jan 2019

- Facilitated stock organisation alongside 4-5 colleagues
- Responsible for aiding dozens of customers on a daily basis
- Gained insight on management in regards to marketing and sales

#### **SKILLS**

- Tableau, spreadsheet software, basic HTML, shellscript, MATLAB, Python 3, awk, sed, and Lager Tableau, spreadsheet software, basic HTML, shellscript, MATLAB, Python 3, awk, sed, and Lager Tableau, spreadsheet software, basic HTML, shellscript, MATLAB, Python 3, awk, sed, and Lager Tableau, spreadsheet software, basic HTML, shellscript, MATLAB, Python 3, awk, sed, and Lager Tableau, spreadsheet software, basic HTML, shellscript, MATLAB, Python 3, awk, sed, and Lager Tableau, spreadsheet software, basic HTML, shellscript, MATLAB, Python 3, awk, sed, and Lager Tableau, spreadsheet software, basic HTML, shellscript, MATLAB, Python 3, awk, sed, and Lager Tableau, spreadsheet software, basic HTML, shellscript, matchange the spreadsheet software, spreadsheet softwa
- Version control using git
- Numerical modeling (such as via the RK4 or Metropolis-Hastings method)