

EDUCATION & AWARDS

University of Oxford, St. Hilda's College - MPhys Physics	2019 - 2023
<ul style="list-style-type: none"> - 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) 	
d'Overbroeck's Sixth Form	2021 - Present
<ul style="list-style-type: none"> - 5 A Levels: Maths - A*, Further Maths - A*, Economics - A*, Physics - A*, French - B 	2016 - 2018
Oulder Hill Community School	2016
<ul style="list-style-type: none"> - 11 GCSEs A*-A including English, Maths, and Science 	

EXPERIENCE

Ditchley Foundation (Network Analysis Intern)	Jul 2021 - Aug 2021
<ul style="list-style-type: none"> - Queried and analysed a neo4j graph database (~ 110K nodes) using Cypher Query Language alongside Python - Drew out trends and within the database of people and presented them visually alongside my team - Began topic modelling using on call notes within the database using the Gensim and NLTK libraries - Conducted research into themes and roles of key figures for potential Ditchley Conferences 	
Jinja Education Trust (Research Intern)	Jun 2021
<ul style="list-style-type: none"> - Researched climate education resources and methods for use with schoolchildren in rural environments - Identified and evaluated potential NGO funding sources for educational projects - Provided outline 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
<ul style="list-style-type: none"> - 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 recommendations to partner school to bolster their GCSE physics programme 	
The Brilliant Club (Charity and Development Intern)	Dec 2020
<ul style="list-style-type: none"> - 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 recommendations for more inclusive operations 	
OxFizz (Widening Participation Intern)	Aug 2020
<ul style="list-style-type: none"> - 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 ~ 500 students - Investigated existing access provisioning and identified lacks therein, presenting these gaps graphically - Provided recommendations 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
<ul style="list-style-type: none"> - 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 ~ 2,500Wh daily - Liased with local organisations to determine possible training and funding for the project 	
Citizens Advice (Campaigns and Research Intern)	Apr 2020
<ul style="list-style-type: none"> - 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
<ul style="list-style-type: none"> - 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 	

SKILLS

- Tableau, spreadsheet software, basic HTML, shellscrip, MATLAB, Python 3, awk, sed, and \LaTeX
- Version control using git
- Numerical modeling (such as via the RK4 or Metropolis-Hastings method)
- Basic natural language processing (e.g. text sanitisation and topic modelling)