



Education & Qualifications

- 2018 - 2022 **MRes + PhD in Mathematical Genomics and Medicine — University of Cambridge, Clare Hall**
(ongoing) Department of Applied Mathematics & Theoretical Physics. Funded by Wellcome Trust Studentship.
Courses : Algorithms, Machine Learning, Markov Chains, Probability, Genetics, Mathematical Biology
- 2016 - 2017 **MPhil in Computational Biology (Distinction) — University of Cambridge, Queens' College**
Department of Applied Mathematics & Theoretical Physics. Overall mark : 81
Courses : Genomics, Bioinformatics, Scientific Programming, Population Genetics, Image Analysis
- 2013 - 2016 **BSc in Biotechnology (First-Class Honours)— Imperial College London**
Placed first in the cohort of 150 students. Dean's List 2016. Overall mark : 80
- 2013 **Certificate of Advanced English (CAE), Cambridge English**
Obtained Grade A with average score of 85
- 2012 - 2013 **INTI International College Penang, Malaysia**
Cambridge International Examinations A-Levels : Mathematics (A*), Biology (A*), Chemistry (A*)

Skills & Expertise

- Coding** Proficient in R and Python. Version control with Git. Command line in Unix/Linux.
- Data Science** Statistical analysis and data visualisation of large scale and high dimensional datasets. Familiar with common machine learning workflows. Scientific programming.
- Bioinformatics** Processing and analysis of sequencing data including RNA- and ChIP-Seq. Molecular graphics with PyMol.
- Image Analysis** Basic MATLAB and OpenCV scripting. Biological image analysis with ImageJ.
- Web Design** Responsive HTML & CSS. Familiar with static site generators like Jekyll. Some knowledge of Javascript.
- Creative Work** 4 years of experience in photography and Photoshop. Basic digital illustration with Illustrator.
- Misc** Some C++ and MATLAB. Document preparation with LaTeX and Markdown.

Research Experience

- 2017 - 2018 **Research Assistant in Bioinformatics (10 months) — Sainsbury Laboratory Cambridge University**
- Streamlined and reorganised the lab's computational pipelines for analysing genomics data. Run-time efficiency was dramatically improved and allowed parallel execution of tasks.
 - Designed coding tutorials and workshops for plant biologists in various research groups.
 - Devised and co-supervised Masters projects for two students.
- 2017 **MPhil Research Student in Population Genetics (10 weeks) — Durbin Group, Sanger Institute**
- Utilised statistics and mathematical modelling on genomic data to investigate cichlid fish evolution.
 - Discovered genes that might have been ecologically important for the formation of new species.

- 2016 **Final Year BSc Project in Image Analysis (8 weeks) — Department of Life Sciences, Imperial College**
‣ Developed image analysis methods to quantify the timing and positioning of cell division.
‣ Automated lab pipelines to create high quality microscopy figures for publication.
- 2015 **Bioinformatics Summer Project (12 weeks) — Department of Life Sciences, Imperial College**
‣ Implemented a prototype *Python* script to detect specific genetic patterns via string matching.
- 2014 **Summer Internship (10 weeks) — School of Pharmaceutical Sciences, Universiti Sains Malaysia**
‣ Gained experience in molecular biology bench work and shadowed personnel in a clinical trial.

Positions of Responsibility

- 2018-2019
(ongoing) **Creative Director — Clare Hall Garden Party Committee, University of Cambridge**
‣ Produced, designed and administered event website for marketing and publicity.
‣ Implemented responsive web design in HTML + CSS to optimise for desktop and mobile viewing.
‣ Strengthened the event's online presence on social media to increase ticket revenue.
‣ Collaborated with team to negotiate with entertainment performers and food caterers.
- 2014 - 2016 **Webmaster & Secretary — Imperial College Speakers, Toastmasters**
‣ Attained public speaking and presentation skills in the Toastmasters International programme.
‣ Mentored and supported undergraduates about effective communication.
‣ Reshaped and redesigned outdated society website to establish a new image for the club.
‣ Liased with external speakers in Central London to organise speeches, competitions and training sessions for the members.
- 2013 - 2015 **President's Ambassador — Imperial College London**
‣ Represented the College to meet prospective students, parents and international delegates on official campus tours and open days.

Awards

- 2018 **Wellcome Trust + Cambridge Trust Studentship in Science**
Full MRes + PhD funding for non UK/EU student over 4 years.
- 2016 **Beloff Chain Prize, Imperial College London**
Top of cohort (150 students) in final year of BSc.
- 2016 **Toastmasters International — Competent Communicator (CC) and Leader (CL)**
Completed 10 public speaking projects, focusing on body language, vocal variety and eye contact.
- 2015 **Imperial Plus Volunteer Accreditation, ASDAN**
Completed 100 hours of extracurricular volunteering in one academic year.
- 2014 **Wiley Book Prize, Imperial College London**
Top 3 in first-year of BSc Biochemistry/Biotechnology.

References

Available upon request.