

Zébulon Goriely

Cambridge, United Kingdom

✉ zebulon.goriely@cl.cam.ac.uk

☎ +44 744 347 3369

in in/zgoriely

Education

University of Cambridge

Ph.D in Computer Science – Computation Linguistics

Cambridge, UK

2021 – present

- Researching Child Language Acquisition and Natural Language Processing
- Reviewer for CoNLL 2022

University of Cambridge

B.A (Hons) + M.Eng (Hons.) in Computer Science

Cambridge, UK

2017 – 2021

- Achieved a First in every year of the B.A (82% in final year)
- Achieved a Distinction in the M.Eng (90% overall, ranked 2nd)

The Cherwell School

*A-Levels (4 A*s in Maths, Further Maths, Physics, Computer Science)*

Oxford, UK

2015 – 2017

AS-Levels (A in Photography)

Magdalen College School

*GCSEs (10 A*s)*

Oxford, UK

2013 – 2015

Academic Awards

- Cambridge Trust Vice-Chancellor's Scholarship (PhD funding) 2021
- Best Part III dissertation (with a dissertation score of 96) 2021
- President's Prize for Computer Science (for a significant Distinction in the M.Eng.) 2021
- Queens' Foundation Scholarship (for a First in the B.A.) 2021
- Queens' College Computer Science Prize (for a First in end-of-year exams) 2018,2019,2020

Research

Transformer Language Models and Child Language Acquisition

Ph.D Research

- Developing a phoneme-based transformer language model for studying language acquisition
- Training the model on child-directed speech from CHILDES
- Exploring the acquisition of words, morphology and syntax across multiple languages

Word Segmentation from Child-Directed Speech Using Multiple Cues

M.Eng Dissertation

- Created a word segmentation model that outperformed prior work
- Evaluated on 26 languages, investigating information-theoretic properties

Simulating Language Learning and Evolution

B.A Dissertation

- Developed a simulation of entities learning language and evolving with a genetic algorithm
- Entities modelled using feed-forward neural networks and evaluated against prior work

Employment History

Engineering roles.....

Optiver – Tech Intern

2020

- Developed a command-line tool to assist developers, working independently towards a team's goals
- Chosen out of a pool of 1000 applicants for the internship and offered a full-time position afterwards
- Taught basic principles of finance through the Optiver introductory lecture series

Diffblue – Tech Intern

2018

- Developed testing models of the Java Runtime Library to increase coverage
- Worked in a team of researchers and contributed to the code base
- Adhered to strict coding standards and unit-tested contributed code

Teaching roles.....

- University of Cambridge – Supervisor / Demonstrator** 2021 – present
- Paid supervisor and demonstrator for several undergraduate Computer Science courses
 - Courses: *Computation Theory, Machine Learning and Real-World Data* and *Formal Models of Language*
- Doxa / Oros Education / Whetstone Tutors – Online Tutor** 2019 – present
- Delivers lessons in programming and Oxbridge applications to students aged 13 to 18
- Gillots School – Teaching Internship** 2019
- Trained in teaching and taught lessons to year 10 students in Computer Science in Maths

Outreach roles.....

- Sutton Trust – Supervisor** 2022
- Supervised and demonstrated example lessons in Computer Science for sixth-form students
- Slipstream Education / Clydeside Education – Online Mentor** 2020, 2021
- Volunteered to assist disadvantaged students seeking to apply to Oxbridge
- Queens’ Access Road Show – Speaker** 2019
- Delivered presentations to hundreds of students at a dozen target schools
 - Spoke to students and answered questions about university applications and Cambridge

Committee / Teamwork Roles

- Watersprite Film Festival – Festival Head of Operations** 2022 – present
- Overseeing all operations of the second-largest student film festival in the world
 - Managing and recruiting a team of 60+ students across 8 departments
 - Organising the judging of 1400+ films by 200+ volunteer judges
 - Planning events, securing funding and inviting speakers to present at the festival
- Cambridge University Film Association – Production Officer** 2019 – 2021
- Presented a series of workshops for students interested in filmmaking
 - Managed the lending of the society’s filmmaking equipment to members
- Queens’ College JCR – Computer Officer, Secretary** 2018 – 2020
- Ran meetings and communications between the undergraduate body and college
 - Published a weekly newsletter, organised surveys and kept minutes
 - Managed communication and technological demands of the committee
- Varsity – Head of Video** 2017 – 2018
- Filmed, produced and edited features for the world-class student newspaper
 - Oversaw and managed all video production by the team

Creative Pursuits

- FilmByZeb Youtube Channel** 2016 – present
- Produced over 100 videos with a focus on story-telling and high production value
 - Professional videos for Hannibal Buress, Queens’ College and the Department of CS
 - Created a series of viral Tiktoks, amassing a total of 1.5M views and 130k likes
- Cambridge Theatre and Cambridge Film Involvements** 2017 – 2021
- Experience with directing, producing, sound, lighting, publicity and videography
 - Involved with 25 plays and 7 short films, including *Day in the Mind* and *Convalescence*

Publications

Zébulon Goriely, Andrew Caines, and Paula Buttery. Word segmentation from child-directed speech using multiple cues. Manuscript submitted for publication, 2022.

References available on request.