Ben Chugg

Mathematical Institute, University of Oxford
benjamin.chugg@maths.ox.ac.uk
+44 7552794172
https://benchugg.com

Education

M.Sc., Mathematics and the Foundations of Computer Science. *Expected 2019*
The University of Oxford, United Kingdom.
Thesis: The Graph-Simplex Correspondence and its Algorithmic Implications.
Supervisor: Renaud Lambiotte.

B.Sc., Combined Honours in Mathematics and Computer Science. 2018
The University of British Columbia, Canada.
Thesis: A Model for Computing in Dynamic, Resource-Limited Environments.
Supervisor: William Evans.

Awards

Mona Leith Memorial Scholarship	2018
Percy Walter Perris Scholarship	2018
Undergraduate Teaching Assistant Award (Computer Science)	2018
Shirley Snelgrove and John Yule Scholarship	2017
NSERC Undergraduate Student Research Award, Computer Science	2016, 2017
University of British Columbia Dean's list	2015 - 2018
University of British Columbia Chancellor Scholar	

Papers

1. Submodular Stochastic Probing with Prices. With Takanori Maehara. *6th International Conference on Control, Decision, and Information Technologies, 2019.*
2. Output-Oblivious Stochastic Chemical Reaction Networks. With Anne Condon and Hooman Hashemi. Full paper in the *22nd International Conference on Principles of Distributed Systems*, 2018. Poster in the *24th International Conference on DNA Computing and Molecular Programming.*
3. Simultaneous Visibility Representations of Undirected Pairs of Graphs. With William Evans and Kelvin Wong. *In Preparation.*

Experience

Research Intern June - August 2018
RIKEN Center for Advanced Intelligence Project, Tokyo. Member of the Discrete Optimization Unit, supervised by Dr. Takanori Maehara.

Visiting Researcher May 2018
The American University of Beirut (AUB), Lebanon. Hosted by Professor Abu Salem.

NSERC Research Assistantship 2016 - 2017
The Algorithms Lab, University of British Columbia

- May '16-August '16, supervised by Professor William Evans. Worked on problems in computational geometry and geometric graph theory.
- May '17-August '17, supervised by Professor Anne Condon. Worked in stochastic chemical reaction network theory.

President and Founder 2016-2018
Code the Change UBC

Teaching

Teaching Assistant and Peer Tutor 2015 - 2018
The University of British Columbia,

- Teaching Assistant for the computer science department for the courses CPSC 221: Basic algorithms and data structures, CPSC 320: Intermediate algorithm design and analysis, and CPSC 420: Advanced algorithm design and analysis.
- Peer tutor for Access and Diversity in first and second year math, physics, and computer science courses.

Talks

1. *Output-Oblivious Stochastic Chemical Reaction Networks* June 2019
   OxCSC 2019, Oxford, UK.
2. *Submodular Stochastic Probing with Prices* April 2019
   CODIT 2019, Paris, France.
3. *Output-Oblivious Stochastic Chemical Reaction Networks* December 2018
   OPODIS 2018, Hong Kong, China.
4. *Unconstrained Submodular Maximization in MapReduce* June 2017
   CUCSC 2017, Toronto, Canada.

Skills

Computational
Languages: Familiarity with Python, C++, LaTeX, C, and Java.
Numerics and Optimization: Proficiency with Matlab. Familiar with Maple.
Web: Familiar with HTML/5, CSS, Javascript (Node.js), Ruby on Rails, Django.

Languages
Fluent in English and French. Awarded the DELF (Diplôme d'études en langue française) certificate in 2012.