

EDUCATION

M.Sc., Applied Mathematics – Simon Fraser University Sep 2020-now

- Committee: Ben Adcock (supervisor), Nilima Nigam

B.Sc., Mathematics Honours – Simon Fraser University Sep 2014-Apr 2020

- Minor in *Computing Science*
- Thesis title: *Diversities, Cluster Analysis, and Ultrametric Embeddings*
- Committee: Paul Tupper (supervisor), Jonathan Jedwab

RESEARCH EXPERIENCE

Undergraduate Research Assistant – Simon Fraser University

- NSERC USRA project supervised by Paul Tupper May-Aug 2017
- USRA project supervised by Karen Yeats May-Aug 2016

WORK EXPERIENCE

Data scientist – Statistics Canada Oct 2019-Aug 2020

- Designed and implemented OpenTabulate, a data pipeline command line tool Jan-Apr 2019
- Assembled datasets for Canadian health and education facility microdata May-Aug 2018

PUBLICATIONS

Conference abstracts

- B. Adcock & M. Neyra-Nesterenko, “*Provably Accurate, Stable and Efficient Deep Neural Networks for Compressive Imaging*”, International Conference on Computational Harmonic Analysis (2021)

PRESENTATIONS

Contributed talks

- *Stable, Accurate and Efficient Deep Neural Networks for Gradient Sparse Imaging*
SIAM Conference on Imaging Science (Mar 22, 2022)
- *Stable, accurate and efficient deep neural networks for inverse problems with analysis sparse models*
SFU Operations Research Seminars (Feb 14, 2022)
- *Provably Accurate, Stable and Efficient Deep Neural Networks for Compressive Imaging*
International Conference on Computational Harmonic Analysis (Sep 17, 2021)
- *Provably Accurate and Stable Deep Neural Networks for Imaging*
CAIMS Annual Meeting (Jun 23, 2021)

- *Provably Accurate and Stable Deep Neural Networks for Imaging*
Ottawa Mathematics Conference (May 28, 2021)

AWARDS

NSERC Canada Graduate Scholarships Master's	May 2021-Apr 2022
Value: \$17500, received from NSERC by application	
Peter Borwein Memorial Graduate Scholarship	Jan-Apr 2022
Value: \$1500, received from SFU by nomination	
BC Graduate Scholarship	Sep 2020-Aug 2021
Value: \$15000, received from SFU by nomination	
NSERC Undergraduate Student Research Award	May-Aug 2017
Value: \$4500, received from NSERC by application	
VPR Undergraduate Student Research Award	May-Aug 2016
Value: \$4500, received from SFU by application	

WORKSHOPS and DEVELOPMENT

PIMS Math to power Industry workshop – University of Calgary	Aug 3-27, 2021
<ul style="list-style-type: none"> • Completed MITACS courses in communication and team building • Presentation and report on Serious Labs project of developing real-time simulation for hydraulic systems 	

TEACHING and MENTORSHIP

Teaching assistant - Simon Fraser University	
• Algebra Workshop, Mathematics of Data Science	Spring 2022
• Vector Calculus, Applied Calculus Workshop	Spring 2021
• Algebra Workshop	Fall 2020
• Applied Calculus Workshop	Fall & Spring 2018

TECHNICAL SKILLS

- Linux and Windows
- Python, git, bash, LaTeX, MATLAB
- Knowledge of Python modules for data and numerical analysis, web scraping and machine learning

MEMBERSHIPS

Canadian Applied and Industrial Mathematics Society (CAIMS)	Jan 2021-now
Society for Industrial and Applied Mathematics (SIAM)	Jan 2021-now