Abel Emanuel Romer

CONTACT INFORMATION

See LinkedIn for contact information

E-mail: *N/A*
Website: https://www.abelromer.com
GitHub: https://github.com/ahblay

EDUCATION

University of Victoria, Victoria, British Columbia
M.Sc, concentration in Discrete Mathematics, Sep. 2020 – present
Advisors: Dr. Peter Dukes, Dr. Jonathan Noel
Thesis: *N/A*

Quest University Canada, Squamish, British Columbia
B.A.Sc, concentration in Mathematics, May 2017
Advisors: Dr. G. Van Brummelen
Thesis: *Winning Dots-and-Boxes in Two and Three Dimensions*
Cumulative GPA: 3.81 out of 4.0

St. Olaf College, Northfield, Minnesota, USA
Budapest Semesters in Mathematics, Fall 2015
Cumulative GPA: 3.87 out of 4.0

SCHOLARSHIPS AND AWARDS

UVic Graduate Award, University of Victoria	*Fall 2020 – present*
President's Honors Award, Quest University Canada	*Spring 2013, Fall 2014, Spring 2015*
President's Scholarship, Quest University Canada	*Sep. 2012 – May 2017*
Quest University Canada Scholarship, Quest University Canada	*Sep. 2012 – May 2017*

MATHEMATICAL WRITING

Dependent Random Choice
Review Paper
https://www.abelromer.com/static/combo.pdf (2021)

Supersaturation
Review Paper
https://www.abelromer.com/static/extremal.pdf (2021)

Partial Orders in Tournaments
Review Paper
https://www.abelromer.com/static/gt1.pdf (2020)

Stable Matchings
Review Paper
https://www.abelromer.com/static/gt2.pdf (2020)

Split Graphs
Review Paper
https://www.abelromer.com/static/gt3.pdf (2020)

List Colorings
Review Paper
https://www.abelromer.com/static/gt4.pdf (2020)

TEACHING EXPERIENCE	Teaching Assistant	*Sep. 2020 – present*
	University of Victoria, Victoria, BC	

- *Reviewed and marked student work in mathematical logic, combinatorics and graph theory*

	Teaching Assistant	*Sep. 2013 – May 2016*
	Quest University Canada, Squamish, BC	

- *Held review sessions for calculus 1, 2 and multivariable, differential equations, and spherical trigonometry*
- *Hosted 200+ hours of drop-in sessions, assisting students with both rhetorical and quantitative coursework*

	Grader	*Jan. 2018 – Dec. 2018*
	The Art of Problem Solving, online	

- *Provided detailed written feedback for students in prealgebra, algebra, geometry and number theory courses*
- *Reviewed and corrected student submissions for mathematical accuracy, precision, style and clarity*

PROFESSIONAL EXPERIENCE	Freelance Web Developer	*Nov. 2017 – present*
	Vancouver, BC	

- *Designed and implemented a web framework for a Python-based linear optimization solution to employee scheduling*
- *Implemented server side request handling with Python Flask and MongoDB, algorithmic optimization with PuLP, and client side interfacing in HTML, CSS, Javascript and JQuery*

TALKS	**Keystone Symposium**, Quest University Canada	*Apr. 2017*

- *The Theory of Dots-and-Boxes in Higher Dimensions*

VOLUNTEER EXPERIENCE	Journal Founder and Editor	*Sep. 2014 – May 2016*
	Momenta: Quest Academic Journal, Squamish, BC	

- *Edited and laid the groundwork for the first edition of Quest's student-run academic journal*
- *Attended organizational meetings and held workshops to guide peers through the review process*

	Assistant to Math Professor	*Jan. 2017 – Feb. 2017*
	Sonoma State University, Rohnert Park, CA	

- *Assisted in the design and implementation of a Math Teacher Circle in Sonoma County, CA*
- *Wrote class plans on Pick's Theorem, Archimedes' Principle, and Tilings of the Plane designed to focus self-guided learning*

TECHNICAL SKILLS	Languages: Python, LaTeX, Java, Javascript, HTML5, CSS
	Databases: MongoDB, SQLite, MySQL, Postgres
	Version Control/OS/Libraries/Other: Git, UNIX (macOS), Pandas, SciKit Learn, PuLP

OTHER WORK EXPERIENCE	Landscaper, Symbiotic Landscapes	*Sep. 2019 – Apr. 2020*
	Bicycle Courier, The Breakfast Courier	*Sep. 2017 – Dec. 2017*
	Interpreter, Britannia Mine Museum	*June 2017 – Aug. 2017*