Graham Gordon

EDUCATION

University of Washington, Seattle WA — Spring 2020
Ph.D., Mathematics

Auburn University, Auburn AL — Spring 2015
Bachelor of Science, Mathematics and Physics

Budapest Semesters in Mathematics, Budapest, Hungary — Summer 2014
Honors Diploma

EXPERIENCE

Mathematics Teacher — Fall 2020 – Present
Proof School, San Francisco CA

- Sample courses: graph theory, trigonometry, geometry, linear algebra

Graduate Student Instructor — Spring 2020
University of Washington, Seattle WA

- Lead instructor for a calculus course

Math and Physics Tutor — Fall 2019 – Spring 2020
Berkeley CA

- Includes a 3-week period of in-class TA-ing at The Crowden School

Math Enrichment Instructor — Summer – Fall 2018
Robinson Center for Young Scholars, Seattle WA

- Developed curriculum for and taught 3-week middle school summer course on combinatorics
- Developed lesson plans for and taught weekend courses for elementary school students

Math Instructor — 2017 – 2018 Academic Year
Freedom Education Project Puget Sound

- Taught and co-taught college-prep and college-level mathematics courses at the Washington Corrections Center for Women in Gig Harbor WA

Graduate Student Teaching Assistant — Fall 2015 – Spring 2019
University of Washington, Seattle WA

- Teaching assistant for various college math courses, including calculus, business calculus, linear algebra, and discrete math
- Lead instructor for a linear algebra class

Undergraduate Teaching Assistant — Fall 2013 – Spring 2015
Auburn University, Auburn AL

SCHOLARSHIPS and FELLOWSHIPS

Steve Mitchell Graduate Fellowship for the Love of Math: *University of Washington, 2018*

Barry M. Goldwater Scholarship: *2014*

Undergraduate Research Fellowship: *Auburn University, Summer 2013 - Spring 2014*

HONORS and AWARDS

Dean's Medal: *Auburn University, Department of Mathematics and Statistics, Spring 2015*

Andrew C. Connor Award: *Auburn University, Department of Mathematics and Statistics*

PUBLICATIONS

Cycle type factorizations in $\mathrm{GL}_n\mathbb{F}_q$, `https://arxiv.org/abs/2001.10572`, submitted.

Existence and hardness of conveyor belts, with Molly Baird, Sara C. Billey, Erik D. Demaine, Martin L. Demaine, David Eppstein, Sándor Fekete, Sean Griffin, Joseph S. B. Mitchell, and Joshua P. Swanson, in The Electronic Journal of Combinatorics, Vol. 27, Iss. 4 (2020)

A classical analogue for adiabatic Stark splitting in non-hydrogenic atoms, with F. Robicheaux, in J. Phys. B: At. Mol. Opt. Phys. 46 (2013) 235003

PRESENTATIONS

Cycle type factorizations in $\mathrm{GL}_n\mathbb{F}_q$

- University of Washington Combinatorics Seminar, May 2020
- UC Davis Algebra and Discrete Mathematics Seminar, March 2020
- UMASS Amherst Discrete Math Seminar, February 2020
- MIT-Harvard-MSR Combinatorics Seminar, February 2020
- UC Berkeley Combinatorics Seminar, February 2020

Enumerating Factorizations in $\mathrm{GL}_n\mathbb{F}_q$

- University of Minnesota Combinatorics Seminar, November 2018

My favorite facts about $\mathrm{GL}_n\mathbb{F}_q$

- University of Minnesota Student Combinatorics and Algebra Seminar, November 2018

Power-Conserving Selective-Range Multilateration for Wireless Sensor Network Localization

- MAA Southeast Section Meeting, March 2015
- Auburn University Research Week, April 2014

A classical analogue for adiabatic Stark splitting in non-hydrogenic atoms

- National Conference on Undergraduate Research, April 2014
- Society of Physics Students Zone 6 Conference, March 2014

ACTIVITIES

Seattle Public Library Homework Help volunteer: *Fall 2018–Spring 2019*

Teaching Assistant Mentor, University of Washington, Department of Mathematics: *Fall 2018*

Graduate Student Representative, University of Washington, Department of Mathematics: *Fall 2017–Spring 2018*

William Lowell Putnam Mathematical Competition: *Participant, 2012–2014*

Auburn Mathematical Puzzle Challenge: *Volunteer, 2012–2014*

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