

Jamie Shive, B.S.
Graduate Teaching Assistant
Department of Mathematics
Virginia Commonwealth University
Phone: (610) 297-1292
Email: shivejl@vcu.edu

Education

Ph.D. Virginia Commonwealth University (anticipated completion May 2021)

Major: Systems Modeling and Analysis

Research Area: Graph Theory

Advisor: Dr. Richard Hammack

B.S. Virginia Commonwealth University, Richmond (May 2016)

Major: Applied Mathematics

Professional Experience

- Instructor, Center for Talented Youth
Johns Hopkins University (June 2019 - present)
Courses Taught: Graph Theory and Combinatorics, Graph Theory and Algorithms
Modalities: Face-to-face, Online synchronous
- Graduate Instructor of Record, Department of Mathematics
Virginia Commonwealth University (August 2017 - present)
Courses Taught: College Algebra
Modalities: Face-to-face, online synchronous, online asynchronous
- Graduate Teaching Assistant
Virginia Commonwealth University (August 2016 - present)
Recitation Classes: Statistical Thinking (Stat 208)
Other Duties: Graded for and assisted with Precalculus, graded and proctored for Basic Practices of Statistics, proctored for Statistical Thinking
- Tutor of Mathematics, Math Help Center
Virginia Commonwealth University (August 2016 - present)
Duties: Tutored undergraduate mathematics students in subjects ranging from College Algebra to Introduction to Real Analysis

Research Interests

- Graph Theory
 - Product graphs
 - Factoring product graphs
 - Product graph invariants
 - Algorithms
 - Games on Graphs

Publications

1. "Lexicographic Palindromic Products." Manuscript in Preparation (2020)
2. "Direct Palindromic Products." Manuscript in Preparation (2020)
3. "Palindromic Products." The Art of Discrete and Applied Mathematics, Accepted Manuscripts, 2019 (with R. Hammack)
4. "Ring Dominating Functions in Graph Products." The Bulletin of the Institute of Combinatorics and its Applications, 84: 65-78, 2018 (with T. Chomko, K. McCall, A. McCleary, and D. Taylor)

Presentations

1. "Lexicographic Palindromic Products"
 - a. Graduate Student Combinatorics Conference, UC San Diego, March 2020 (cancelled)
 - b. Cumberland Conference, William and Mary, May 2020 (cancelled)
2. "Black and White with Queens All Over"
 - a. Girls in Math Day, MathSci Innovation Center, December 2018, 2017, 2016, 2015
3. "Palindromic Graphs"
 - a. Graduate Student Seminar, May 2018
 - b. Invited Speaker at AMCURS, University of Pittsburgh Greensburg, March 2018
 - c. Graduate Student Seminar, March 2018
4. "Three Open Problems in Graph Pebbling"
 - a. Discrete Mathematics Seminar, Virginia Commonwealth University, December 2017
5. "Graph Brain Project"
 - a. Graduate Student Seminar, Virginia Commonwealth University, October 2017
6. "A Generalization of Total Perfect Codes in Graphs"
 - a. MAA/CURM Spring Conference, Loyola Marymount University, April 2016
7. "Odd Closed r -Dominating Sets in the Strong Product of Graphs"
 - a. Regional Mathematics and Statistics Conference, University of North Carolina Greensboro, November 2015

Service

Service to the Profession

- Judge for Undergraduate Presentations, AMCURS, March 2018
- Member of Graduate Student Panel, AMCURS, March 2018
- Co-referee for Discrete Mathematics (one paper)

Memberships

- American Mathematical Society
- Society for Industrial and Applied Mathematics

Technical Skills

- Software: Python, R, Maple, Matlab, Julia, Sage/Cocalc
- Computing Platforms: Windows, Unix/Linux, Mac
- Text Formatting and Office Computing: Latex, Microsoft Office Word/Excel/Powerpoint, Google Docs/Spreadsheets/Slides/Drive
 - Learning Management System: Blackboard, Moodle, Canvas