CONTACT INFORMATION

University of South Carolina Department of Mathematics LeConte College, 317N 1523 Greene St. Columbia, SC 29208 farmanb@math.sc.edu 803.777.9707 http://people.math.sc.edu/farmanb

EDUCATION

Doctor of Philosophy, Mathematics

August 2012 - Present

University of South Carolina, Columbia, SC

Dissertation Title: Geometry of derived categories on noncommutative projective schemes

Advisor: Matthew Ballard

Master of Science, Mathematics

May 2011

University of Vermont, Burlington, VT Major Concentration: Abstract Algebra

Minor Concentration: Algebraic Number Theory

Bachelor of Science, Computer Science Rensselaer Polytechnic Institute, Troy, NY Minors: Applied Mathematics and French May 2009

EMPLOYMENT

Graduate Teaching Assistant

August 2012 - Present

University of South Carolina, Columbia, SC

- Teach undergraduate level mathematics courses while working towards a Ph.D in Mathematics.
- Help run a math department sponsored tutoring center for undergraduates.

Graduate Teaching Assistant

August 2009 - May 2011

University of Vermont, Burlington, VT

- Taught undergraduate level introductory calculus and discrete mathematics courses while working towards an M.S. in Mathematics.
- Helped run a math department sponsored Help Session for undergraduates.

Undergraduate Research/Teaching Assistant

 $\mathrm{May}\ 2008$ - $\mathrm{May}\ 2009$

Rensselaer Polytechnic Institute, Troy, NY

- Assisted Professor Jeffrey C. Trinkle and his student, Steven Berard, with development of the Qt interface for the daVinci Code (DVC) physical simulator (http://www.robotics.cs.rpi.edu/dvc).
- Served as Teaching Assistant for Professor Trinkle's Robotics Course, which used DVC. Responsibilities included teaching students how to use the software and designing/grading homework assignments that used DVC.

PAPERS

Internal Hom categories for noncommutative projective schemes. with Matthew Ballard. In progress.

Expected Aug 2016

CONFERENCES ATTENDED

Georgia Algebraic Geometry Symposium University of Georgia, Athens, GA	March 3-5, 2017
Workshop on Symplectic Varieties and Geometric Representation Theory The University of North Carolina at Chapel Hill, Chapel Hill, NC	October 28-30, 2016
UGA-SWAG: Summer Workshop in Algebraic Geometry University of Georgia, Athens, GA	August 26-29, 2016
Temple Graduate Student Conference in Algebra, Geometry, and Topology Temple University, Philadelphia, PA	May 14-15, 2016
Georgia Algebraic Geometry Symposium Emory University, Atlanta, GA	October 2015
AMS Summer Institute on Algebraic Geometry University of Utah, Salt Lake City, UT	July 27 - 31, 2015
Georgia Algebraic Geometry Symposium University of Georgia, Athens, GA	October 2014
Arizona Winter School University of Arizona, Tucson, AZ	March 2014
Palmetto Area Number Theory Series (PANTS) XXI Clemson University, Clemson, SC	December 2013
Palmetto Area Number Theory Series (PANTS) XX Davidson College, Davidson, NC	September 2013
Algebraic Geometry Northeastern Series (AGNES) Yale University, New Haven, CT	April 2013
AMS Spring Western Sectional Meeting University of Colorado, Boulder, CO	April 2013
Palmetto Area Number Theory Series (PANTS) XIX University of South Carolina, Columbia, SC	December 2012
Palmetto Area Number Theory Series (PANTS) XVIII Wake Forest University, Winston-Salem, NC	September 2012

ORGANIZER

Student Algebra/Number Theory Seminar University of South Carolina

Summer 2016

Student Algebraic Geometry, Commutative Algebra, and Number Theory Seminar Summer 2015 University of South Carolina

Student Algebraic Geometry Seminar University of South Carolina

Spring 2015

Student Algebraic Geometry Seminar

University of South Carolina

Fall 2014

PRESENTATIONS

Noncommutative Projective Schemes

May 13, 2016

Temple Graduate Student Conference in Algebra, Geometry, and Topology

Temple University

Noncommutative Projective Schemes

May 14, 2016

Student Algebra/Number Theory Seminar

University of South Carolina

Fully Faithful Abstract Nonsense:

November 2015

Representable Functors and The Yoneda Embedding

Graduate Colloquium

University of South Carolina

Fully Faithful Abstract Nonsense:

July 2015

Representable Functors and The Yoneda Embedding

Graduate Student Algebraic Geometry, Commutative Algebra, and Number Theory Seminar University of South Carolina

TEACHING EXPERIENCE

University of South Carolina

Columbia, SC

Instructor of Record

Math 116 - Brief Precalculus Mathematics	Fall 2016
Math 170 - Finite Mathematics	Spring 2016
Math 116 - Brief Precalculus Mathematics	Fall 2015
Math 111 - Basic College Mathematics	Spring 2015
Math 115 - Precalculus Mathematics	Fall 2014
Math 142 - Calculus II	July 2014
Math 170 - Finite Mathematics	Spring 2014
Math 116 - Brief Precalculus Mathematics	Fall 2013
Math 111 - Basic College Mathematics	May - June 2013

Teaching Assistant

Math 141 - Calculus I	Spring 2013
Math 142 - Calculus II	Fall 2012

University of Vermont

Burlington, VT

Instructor of Record

Math 019 - Fundamentals of Calculus I	Fall 2010
Math 017 - Applications of Finite Math	Summer 2010
Math 017 - Applications of Finite Math	Spring 2010
Math 017 - Applications of Finite Math	Fall 2009

Rensselaer Polytechnic Institute

Troy, NY

Teaching Assistant

CSCI~4940 - Robotics~II

Spring 2009

SERVICE

University of South	Carolina Hi	gh School Math	Contest Proctor	January 2015
University of South	Carolina Hi	gh School Math	Contest Proctor	February 2014
University of South	Carolina Hi	gh School Math	Contest Proctor	January 2013

HONORS

Rensselaer Medalist 2004

 $60,\!000$ scholarship to Rensselaer Polytechnic Institute.

NON-ACADEMIC EMPLOYMENT

Associate August 2011 - August 2012

Princeton Consultants, Inc, Princeton, NJ Information Technology consultant.

 $Mountain\ Ambassador$

Winters 2004-2008

Killington, Ltd., Killington, VT

The Killington Ambassador Program is an on-slope volunteer program designed to improve the experience of guests by providing local knowledge, information, directions, safety tips, and just about any other help a guest might need.