

Education: Ph.D. Mathematics, Purdue University (2013). B.S./M.A. Mathematics (2004-6), Bowling Green State University.

Software background:

- SAS Base Programming (certification pending), SAS Advanced Programming (certification pending).
- HTML, CSS, JavaScript used to maintain course websites at Georgia Tech and Purdue University. [Homepage](#) : [Course](#)
- SAS, Java, C recently learned in preparation for a business analytics job in private sector.
- Mathematica, Maple, math computational software skills developed to perform research-level experiments for projects in theoretical mathematics.
- 10+ years using math typesetting language LaTeX, primarily on Unix machines.

Math background:

- Courses taught: Linear Algebra, Business Calculus, Calculus I-III, Probability and Statistics, College Algebra, Discrete Mathematics, Calculus for Life Sciences, and Finite Mathematics and courses covering graph theory, mathematical logic, algorithms and algorithmic complexity.
- Successful research mathematician: publications include [Refined bounds on the number of connected components of sign conditions on a variety](#), Discrete and Comput. Geom. (2012), and [On the homotopy types of limits of semi-algebraic sets and additive complexity of polynomials](#), J. Eur. Math. Soc. (2014) [both with S. Basu].
- Mathematical research intimately involved theoretical algorithms and computational complexity.

Teaching experience and awards:

- 10+ years teaching at university level:

2013– now	Georgia Institute of Technology Visiting Assistant Professor/Hale Post-doctoral fellow
2006–2013	Purdue University Bisland Dissertation Fellowship, June 2012 - May 2013 Research Assistant, June 2009 - May 2012 Teaching Assistant, August 2006 - May 2009
2004–2006	Bowling Green State University Teaching Assistant

- Committee for the Education of Teaching Assistants “Excellence in Teaching Award”, Purdue University, April 2012.
- Department of Mathematics Excellence in Teaching Award, Purdue University, November 2011.
- Title of Outstanding Graduate Instructor, Purdue Department of Mathematics, 2006 - 2013.

Organizational skills:

- Georgia Tech lead lecturer. I wrote syllabus/exams/quizzes, assigned homework, managed website, and gave lecture to up to 140 students for four undergraduate mathematics classes at Georgia Tech: Calculus I (for engineers), Finite Mathematics, Probability and Statistics, and Linear and Finite Mathematics (logic and proofs, counting principles, induction, graph theory, algorithms and complexity).
- Managed up to 5 TAs per semester at Georgia Tech: designed recitation, wrote weekly worksheet, class logistics.
- Head lecturer at Purdue University for six classes including Linear Algebra and Business Calculus. Duties included weekly lecture to as many as 68 students per semester, wrote all quizzes and some exams, graded homework and quizzes.
- Designed and was lead coordinator for several research projects in theoretical mathematics leading to several publications: refined bounds on Betti numbers of semi-algebraic sets, homotopy types of limits, the Waring rank of real bivariate forms, semi-cylindrical decomposition in o-minimal geometry. ([See my CV](#))
- Managed several projects as well as teaching duties simultaneous with travel to conferences to stay at the cutting edge of my field and to network with established researchers.

Miscellaneous:

- Very friendly and outgoing personality.