

Erik Davis

1510 E 8th St
Tucson, AZ 85719
☎ +1 (520) 869 1908
✉ edavis@math.arizona.edu

Objective

Formally trained mathematician seeking full time position as software engineer, with a preferred emphasis on projects offering challenging technical and mathematical problems.

Education

2010–2016 **Ph.D. Mathematics**, *University of Arizona*, Tucson, AZ.

2004–2009 **B.S. Mathematics**, *University of Texas*, Austin, TX.

Experience

August 2016 **Postdoctoral Research Associate**, *University of Arizona*, Tucson.

– Present Research in probability and random graphs. Instructor for Vector Calculus.

March 2016 **Technical Consultant**, *DimensionalMechanics Inc.*

– June 2016 Provided technical consulting and support on mathematical problems arising in the setting of a distributed, graph-based machine learning system.

2012–2016 **Research Assistant**, *University of Arizona*, Tucson.

General Themes: Computational Harmonic Analysis, Calculus of Variations, and Numerical Optimization with Applications to Data Analysis and Machine Learning.

2011–2015 **Teaching Associate**, *The University of Arizona*, Tucson.

Primary Instructor for the following courses: College Algebra, Precalculus, Calculus I & II, Introduction to Biostatistics, Probability and Statistics for Engineers

Summers **Graduate Assistant**, *The University of Arizona*, Tucson.

2013–2015 Organized Summer Study Sessions for the Department of Mathematics Qualifying Exam

Publications

- E. Davis and S. Sethuraman, *Consistency of Modularity Clustering on Random Geometric Graphs*, Submitted. Preprint available: <http://arxiv.org/abs/1604.03993>

Awards

2010–2011 **NSF VIGRE Fellowship**, *The University of Arizona*.

2016 **Bartlett Fellowship**, *The University of Arizona*.

Computer Skills

Languages Python, C/C++, R, MATLAB, Scheme, SQL

Libraries Numpy, Scipy, matplotlib, pandas, scikit-learn, CVXOPT, NetworkX