

CURRICULUM VITA

Vikram Kamat
School of Mathematical & Statistical Sciences
Arizona State University
Tempe, AZ 85287
vikram.kamat@asu.edu
<http://mathpost.asu.edu/~vkamat>

Education

- 2010(expected) **Ph.D.** Mathematics, Arizona State University.
Dissertation title: Erdős-Ko-Rado type intersection theorems for graphs.
Dissertation advisor: Glenn Hurlbert.
- 2007 **M.A.** Mathematics, Arizona State University.
- 2005 **B.E.** Computer Science and Engineering,
Vivekanand Education Society's Institute of Technology,
Mumbai University, Mumbai, India.

Research Experience

- Summer 2008 Research Associate, Arizona State University.
Mentor: Glenn Hurlbert.
Research Project: Erdős-Ko-Rado theorems for graphs.
- August 9-18, 2006 Participant,
Mathematical Modeling in Industry X - A Workshop for Graduate Students,
Institute for Mathematics and Applications.
Mentor: Chai Wah Wu.
Research Project: Algorithms for the Carpool Problem.
- Spring 2006 Research Associate, Arizona State University.
Mentor: Glenn Hurlbert.
Research Project: Bijections on Lattice paths.

Publications and Preprints

1. G. Hurlbert, V. Kamat, *Two new bijections on lattice paths*, J. Combin. Math. Combin. Comput., 68 (2009), 215 - 223.
2. G. Hurlbert, V. Kamat, *Erdős-Ko-Rado theorems for chordal and bipartite graphs*, submitted.
3. G. Hurlbert, V. Kamat, *A graph-theoretic generalization of Hilton's cross-intersection theorem*, in preparation.

Non-refereed Technical Reports

1. J. P. Boavida, V. Kamat, D. Nakum, R. Nong, C. W. Wu, X. Zhang, *Algorithms for the carpool problem*, IMA Mathematical Modeling in Industry X - 2006 (IMA Preprint Series 2133-6)

Grants and Awards

1. Travel Award (\$1000) from the School of Mathematical & Statistical Sciences, ASU, for travel to the January 2010 Joint Mathematics Meetings.
2. Travel Award (\$695) from the School of Mathematical & Statistical Sciences, ASU, for travel to the November 2009 IPAM workshop on “Topics in Graphs and Hypergraphs”, at UCLA.
3. Professional Development Travel Grant (\$300) from the Graduate Professional Students Association, ASU, for travel to the IPAM workshop on “Topics in Graphs and Hypergraphs”.
4. Travel Award (\$200) from the Texas A & M Research Foundation, for travel to the April 2009 CombinaTexas conference, at the U. of Houston.
5. Research Award(Block Grant), Division of Graduate Studies, ASU, Summer 2008.
6. Conference Travel Grant (\$150) from the GPSA, ASU, for travel to the May 2008 AMS Special Session on “Combinatorics of Partially Ordered Sets”.

Presentations

- **Contributed Talks at Conferences:**

1. “Erdős-Ko-Rado theorems for chordal graphs and trees”, CombinaTexas, U. of Houston, April 25-26, 2009.
2. “Graphs with Erdős-Ko-Rado property”, MAA Southwestern Section Annual Meeting, ASU, April 18-19, 2008.
3. “Two new bijections on lattice paths”, Graduate Student Combinatorics Conference, U. Wisconsin-Madison, April 21-23, 2006.

- **Poster Presentations:**

1. “Chvátal’s Conjecture and Erdős-Ko-Rado Graphs”, IPAM Workshop on “Topics in Graphs and Hypergraphs”, UCLA, November 2-6, 2009.

- **Seminar Talks:**

1. “Erdős-Ko-Rado theorems for chordal graphs and trees”, Discrete Math Seminar, ASU, April 13, 2009.
2. “Two new bijections on lattice paths”, Discrete Math and Algorithms Seminar, ASU, March 24, 2006.

Teaching Experience

Fall 2006 - present

Teaching Assistant,
School of Mathematical & Statistical Sciences,
Arizona State University, Tempe, AZ.

- **Course Instructor**

MAT 170	Pre-calculus	Fall 2007, Spring 2008
MAT 265	Calculus for Engineers I	Fall 2008
MAT 266	Calculus for Engineers II	Spring 2009, Summer 2009
MAT 267	Calculus for Engineers III	Fall 2009

As a course instructor, I have full responsibility for classes which range in size from 19 to 38 students. This includes preparation and organization of lectures, preparing and grading exams, quizzes and homework assignments, as well as assigning the final course grade.

- **Additional Teaching Related Activities**

1. Assisting T.A. and Grader for MAT 211 (Mathematics for Business Analysis) and MAT 119 (Finite Mathematics).
2. Grader for MAT 343 (Applied Linear Algebra) and MAT 472 (Intermediate Real Analysis I).
3. Completed Graduate T.A. training, Fall 2007.
4. Workshop leader for Graduate T.A. training, Fall 2009.