# Sneha Dey Subramanian 

|  | PERSONAL INFORMATION |
| :---: | :---: |
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| Website | https://www.math.uci.edu/~ssubram2 |
| Office address | 410 Rowland Hall, Department of Mathematics, UC Irvine, Irvine, CA 92697, USA |
|  | EDUCATION AND TRAINING |
| 2014- | University of California, Irvine |
|  | Visiting Assistant Professor Department of Mathematics |
| 2009-2014 | University of Pennsylvania |
|  | Doctor of Philosophy in Mathematics Doctoral Advisor: Robin Pemantle |
| 2007-2009 | Indian Statistical Institute, Kolkata |
|  | Masters in Statistics <br> Specialization: Applied Statistics and Data Analysis |
| 2004-2007 | St. Xaviers' College, Kolkata |
|  | Bachelor of Science with Major in Mathematics, and Minors in Statistics and Computer Science |
|  | PUBLICATIONS |
| 2014 | Zeros of a random analytic function approach perfect spacing under repeated differentiation |
|  | with Robin Pemantle, Submitted. Arxiv link: <br> http:/ /arxiv-web3.library.cornell.edu/abs/1409.7956?context=math.CV |
| 2012 | On the distribution of critical points of a polynomial |
|  | Electronic Communications in Probability <br> This paper proves that if points $Z_{1}, Z_{2}, \ldots$ are chosen independently and identically using some measure $\mu$ from the unit circle in the complex plane, with $p_{n}(z)=\left(z-Z_{1}\right)\left(z-Z_{2}\right) \ldots\left(z-Z_{n}\right)$, then the empirical distribution of the critical points of $p_{n}$ converges weakly to $\mu$. |

## AWARDS

October 2013

Good Teaching Award
Award received for Math 170 (Instructor).
Good Teaching Award
Award received for Math 508 (Teaching Assistant).

## TEACHING EXPERIENCE

## Instructor of Record

Math 130A (Probability and Stochastic Processes)
Math 2B (Single Variable Calculus) and Math 130A (Probability and Stochastic Processes)

Math 170 (Ideas in Mathematics): A course for non-math majors, with topics ranging from logic, sets, number theory, probability, cryptography, and their relevance to contemporary science and society.

Teaching Assistant
Math 103 (Introduction to Calculus): A course that introduces concepts and methods of calculus for students with little or no previous calculus experience.

Math 508 (Advanced Analysis I): A course for math majors on analysis on Euclidean spaces.

## Grader

Math 546 (Probability Theory): A course for advanced math or stat majors as well as beginning Ph.D. students of mathematics or statistics.

Math 547 (Stochastic Processes): A course for advanced math or stat majors as well as beginning Ph.D. students of mathematics or statistics.

## TALKS

Zeros of the derivatives of random polynomials and random entire functions

Southern California Probability Symposium, Institute for Pure and Applied Mathematics, UCLA.

Random zero sets under repeated differentiation of an analytic function

Probability Seminar, University of California, Irvine.
Random zero sets under repeated differentiation of an analytic function

UVA Probability Seminar, University of Virginia.
Behavior under differentiation operator of zero sets of random analytic functions

Twelfth Northeast Probability Seminar, City University of New York.
Random zero sets under repeated differentiation

Combinatorics and Probability Seminar, University of Pennsylvania.

October 2012

October 2012

September 2011

2011-2012

2011-2012

2010-2012

Fall 2011

October 2013

July 2012

April 2012

November 2010

Polynomials, Zeros, Critical Points and Probability Probability Seminar, University of California, Berkeley.

Polynomials, Zeros, Critical Points and Probability Combinatorics and Probability Seminar, University of Pennsylvania.

Candidate problems and more Pizza Seminar, University of Pennsylvania.

## OTHER TEACHING DUTIES

Math/Maple Online Help
Provided help in solving problems and understanding concepts weekly at an online discussion board and forum for students of all the calculus courses.

Master TA
Trained new teaching assistants in the mathematics department.
Coordinator of Penn Undergraduate Math Mentorship Program
Organized a program that pairs up undergraduate students with graduate students of like mathematical interests (mentors) to stimulate learning and research.

Mentor for Penn Undergraduate Math Mentorship Program
Mentored two undergraduate students during two academic years.
Sunday Night Reviewer for Math 115 (Calculus II with Probability and Matrices)

Conducted a review session every Sunday night for the course, which included helping students with problems and conceptual questions.

## CONFERENCES AND WORKSHOPS

Midwest Probability Colloquium Northwestern University, Evanston, IL<br>Cornell Probability Summer School<br>Cornell University, Ithaca, NY<br>Graduate Student Probability Conference<br>Georgia Tech University, Atlanta, GA<br>Tenth Northeast Probability Seminar<br>New York University, New York, NY<br>Ninth Northeast Probability Seminar<br>City University of New York, New York, NY

December 26, 2014

