Sneha Dey Subramanian

PERSONAL INFORMATION

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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

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

Zeros of a random analytic function approach perfect spacing under repeated differentiation

with Robin Pemantle, Submitted. Arxiv link:

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

This paper proves that if points $Z_1, Z_2, ...$ are chosen independently and identically using some measure μ from the unit circle in the complex plane, with $p_n(z) = (z - Z_1)(z - Z_2)...(z - Z_n)$, then the empirical distribution of the critical points of p_n converges weakly to μ .

AWARDS

2009-2014 Benjamin Franklin Fellowship, University of Pennsylvania

Fellowship covering tuition and stipend for five years as a graduate student in the Mathematics department.

2012-2013 Herbert S. Wilf Memorial Prize

Prize awarded in recognition of outstanding research and communication.

Summer 2012 Good Teaching Award

Award received for Math 170 (Instructor).

Fall 2010 Good Teaching Award

Award received for Math 508 (Teaching Assistant).

TEACHING EXPERIENCE

Instructor of Record

Winter 2015 Math 130A (Probability and Stochastic Processes)

Fall 2014 Math 2B (Single Variable Calculus) and Math 130A (Probability and Stochastic

Processes)

Summer 2012 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

Spring 2011 Math 103 (Introduction to Calculus): A course that introduces concepts and

methods of calculus for students with little or no previous calculus experience.

Fall 2010 Math 508 (Advanced Analysis I): A course for math majors on analysis on

Euclidean spaces.

Grader

Fall 2011 & 2013 Math 546 (Probability Theory): A course for advanced math or stat majors as

well as beginning Ph.D. students of mathematics or statistics.

Spring 2012 & Math 547 (Stochastic Processes): A course for advanced math or stat majors as

well as beginning Ph.D. students of mathematics or statistics.

TALKS

2014

December 2014 Zeros of the derivatives of random polynomials and random

entire functions

Southern California Probability Symposium, Institute for Pure and Applied

Mathematics, UCLA.

October 2014 Random zero sets under repeated differentiation of an analytic

function

Probability Seminar, University of California, Irvine.

March 2014 Random zero sets under repeated differentiation of an analytic

function

UVA Probability Seminar, University of Virginia.

November 2013 Behavior under differentiation operator of zero sets of random

analytic functions

Twelfth Northeast Probability Seminar, City University of New York.

October 2013 Random zero sets under repeated differentiation

Combinatorics and Probability Seminar, University of Pennsylvania.

October 2012 Polynomials, Zeros, Critical Points and Probability

Probability Seminar, University of California, Berkeley.

October 2012 Polynomials, Zeros, Critical Points and Probability

Combinatorics and Probability Seminar, University of Pennsylvania.

September 2011 Candidate problems and more

Pizza Seminar, University of Pennsylvania.

OTHER TEACHING DUTIES

2013 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.

2011-2012 Master TA

Trained new teaching assistants in the mathematics department.

2011-2012 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.

2010-2012 Mentor for Penn Undergraduate Math Mentorship Program

Mentored two undergraduate students during two academic years.

Fall 2011 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

October 2013 Midwest Probability Colloquium

Northwestern University, Evanston, IL

July 2012 Cornell Probability Summer School

Cornell University, Ithaca, NY

April 2012 Graduate Student Probability Conference

Georgia Tech University, Atlanta, GA

November 2011 Tenth Northeast Probability Seminar

New York University, New York, NY

November 2010 Ninth Northeast Probability Seminar

City University of New York, New York, NY

December 26, 2014