

# Andy Parrish

atparrish@ucsd.edu

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## EDUCATION

**Ph.D. student of Mathematics** at University of California, San Diego Sept 2008 – June 2013 (expected)

**Ph.D. Coursework (GPA: 3.97)**

Random Graphs, Probability, Statistics, Extremal Combinatorics

**C.Phil. in Mathematics** at University of California, San Diego June 2011

**M.A. in Mathematics** at University of California, San Diego June 2010

**B.S. in Mathematics and Computer Science** at University of Maryland, College Park Aug 2003 – Dec 2007

Overall GPA: 3.88, Mathematics GPA: 4.0, Dean's List all semesters

Mathematics departmental High Honors, Computer Science departmental High Honors, University Honors

Studied abroad in the Budapest Semesters in Mathematics program Fall 2006

**Mathematics Coursework**

Linear Algebra, Probability and Statistics, Graph Theory, Cryptography, Abstract Algebra, Set Theory

**Computer Science Coursework**

Object-Oriented Programming, Low-level Programming, Algorithm Analysis, Data Structures, Cryptography

## PROGRAMMING LANGUAGES

**Languages:** C/C++, Python, Java, MATLAB, Mathematica, PHP, MySQL, some Lisp

## INDUSTRY EXPERIENCE

**Software Engineering Intern** at Google Boston June 2011 – Sept 2011

- Designed and implemented a simulation of content distribution servers
- Navigated and understood components of a large code base

**Research Intern** at Johns Hopkins University Applied Physics Laboratory Summers 2007, 2008

- Performed cryptography research, culminating in a paper submitted to RSA-CT conference
- Investigated efficient algorithms for Private Information Retrieval

## ACADEMIC EXPERIENCE

**Teaching Assistant** at UC San Diego for Mathematics Department Sept 2008 – June 2012

- Presented weekly discussion sessions for courses in calculus, differential equations, graduate algebra
- Held office hours, graded exams, and addressed student concerns

**Senior TA** at UC San Diego for Mathematics Department Sept 2012 – Present

- Coordinated orientation for incoming students, and training for new teaching assistants
- Participated in monthly meetings to help advise the direction of the Mathematics Department

**Associate Instructor** at UC San Diego for Mathematics Department Sept 2011 – Dec 2011

- Instructed 120+ students in first-quarter calculus
- Held office hours, coordinated with teaching assistants and a grader

## PUBLICATIONS

"An additive version of Ramsey's theorem," Journal of Combinatorics, 2011, Vol. 4

"Toward a graph version of Rado's theorem," Electronic Journal of Combinatorics, 2013, Vol. 1

"Three Proofs of the Hypergraph Ramsey Theorem," (submitted)

Van der Waerden's Theorem and Its Applications with W. Gasarch and C. Kruskal, Springer (in progress)

## INTERESTS

Juggling, elegant mathematical proofs, animals, pumpkin-launching machines