JAMES PFEIFFER

http://www.math.washington.edu/~jpfeiff/jamesrpfeiffer@gmail.com

142 21st Ave E #3 Seattle, WA 98112 360-616-1403

OBJECTIVE

To use my mathematical training to solve problems and build products.

EDUCATION

Mathematics PhD, University of Washington Advisor: Rekha Thomas. Research topics:

(expected) June 2014

- Semidefinite programming
- Sums of squares relaxations and applications
- Combinatorial optimization

Mathematics BS, University of California, Davis

June 2009

EXPERIENCE

Instructor June 2011 - Present

Mathematics Department, University of Washington

• Taught courses in linear algebra and differential equations.

Software Intern March - May 2012

Future Advisor (futureadvisor.com)

• Assisted in implementing a portfolio optimization component for a financial planning website.

Instructor June - July 2010

Robinson Center, University of Washington

• Created and taught a discrete mathematics course for gifted middle and high school students.

Teaching Assistant

September 2009 - March 2011

Mathematics Department, University of Washington

- Led discussion and worksheet sessions for calculus classes.
- Held office hours and graded student work.

Research Assistant June-August 2007, 2008

Mathematics Department, University of California, Davis

- Worked with professors and other students on mathematics research.
- Tested conjectures via simulations, and implemented proposed algorithms.

Teaching Assistant

Summers 2006, 2007, 2009

Center for Talented Youth

- Assisted with math enrichment classes at a summer camp.
- Led nightly discussion/homework sessions.

PUBLICATIONS

A Semidefinite Approach to the K_i Cover Problem. J. Gouveia and J. Pfeiffer. Preprint (2012). Bootstrap Percolation on the Hamming Torus. J. Gravner, C. Hoffman, J. Pfeiffer, and D. Sivakoff. Submitted to Annals of Applied Probability, 2012.

COMPUTER SKILLS

Programming languages: Python, C, C++, Lisp, Perl, Ruby. Software: Sage, Matlab, SQL, Linux server and desktop.