

# Robert W. Bradshaw

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## Education

- **University of Washington**, Ph.D. Candidate, Mathematics, 2010.
- **Brigham Young University**, Honors B.S., Mathematics, 2004.
- Honors B.S., Linguistics, 2004.

## Selected Employment

- **University of Washington**: TA, RA, and Computer Assistant, 2004-present.
- **Google Inc., Fremont office**: Software Engineering Intern, Summer 2009.
- **Center for Communications Research, La Jolla**: Visiting Research Fellow, Summer 2008.
- **Montlake Elementary School**: Montlake Math Challenge, math coach, 2006-2007.
- **TOPS Middle School**: 7th grade after school math program, 2005-2006.
- **BYU Internet Security Research Lab**: Research Assistant, 2002-2004.
- **BYU Math Department**: Research Assistant, 2003-2004.
- **Institute for Human and Machine Cognition**: Research Assistant, 1997-1998, 2001-2003.
- **LDS Church**: Volunteer Full Time Missionary in France, 1999-2001.

## Awards and Honors

- VIGRE Graduate Fellow
- ARCS (Achievement Rewards for College Scientists) Fellowship
- BYU Heritage Full Tuition Scholarship
- National Merit Scholar
- Eagle Scout Award, Boy Scouts of America

## Publications

- *Bitslicing and the Method of Four Russians Over Larger Finite Fields*, with T. Boothby, 2009 (submitted, arXiv:0901.1413).
- *Randomized Methods in Artin groups of Finite Type*, with S. P. Humphries, International Journal of Algebra and Computation, Vol. 17, No. 4, 2007.
- *Concealing Complex Policies with Hidden Credentials*, with J. Holt and K. Seamons. ACM CCS, 2004.
- *Hidden credentials*, with J. Holt, K. Seamons, and H. Orman. ACM WPES, 2003.

## Other Educational Experience

- **Arizona Winter School**: Special Functions and Transcendence, 2008.
- **Arizona Winter School**:  $p$ -adic Geometry, 2007.
- **MSRI Summer Graduate Program**, Modular Forms, 2006.
- **MSRI Summer Graduate Program**, Mathematical Graphics, 2003.

## Computation

- Founder and leader of the Cython project ([cython.org](http://cython.org)).
- Significant contributions to Sage ([sagemath.org](http://sagemath.org)).
- Programming languages: Fluent in Python, C, Java. Experience with many others.
- Web Development: HTML, JavaScript, PHP, SQL, XML, XSL, CSS, etc.