Travis Scholl

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U.S. Citizen
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Research Interests

- Computational number theory
- Elliptic curve cryptography

Education

2018 Ph.D. Mathematics, University of Washington (advisor: Neal Koblitz)
2013 B.S. Mathematics, University of Oregon

Publications

1. Isolated elliptic curves and the MOV attack. Accepted for publication in *Journal of Mathematical Cryptology*. https://doi.org/10.1515/jmc-2016-0053.
2. Super-Isolated Elliptic Curves and Abelian Surfaces in Cryptography. Accepted for publication in *Experimental Mathematics*. https://doi.org/10.1080/10586458.2017.1412371.
3. Abelian Varieties with Small Isogeny Class and Applications to Cryptography Ph.D. Thesis. 2018.

Research Talks

2018	Jun.	Communicating Mathematics Effectively, University of Oregon
2018	Feb.	Computer Science Theory Seminar, University of Pennsylvania
2018	Feb.	Colloquium, Center for Communications Research Princeton
2017	Oct.	Oregon Number Theory Days, University of Oregon
2017	May.	Number Theory Seminar, University of Washington

Teaching

Math 308: Matrix Algebra with Applications, Instructor
    Spring 2018
Math 124: Calculus I, Teaching Assistant
    Winter 2014

Math 125: Calculus II, Teaching Assistant
> Fall 2013, Spring 2014, Fall 2014, Winter 2014, Spring 2015, Fall 2015, Winter 2016, Spring 2016, Winter 2017, Fall 2017, Winter 2018

Math 126: Calculus III, Teaching Assistant
> Fall 2016

Math 125: Calculus II, Instructor
> Summer 2014, Summer 2015, Summer 2016, Summer 2017, Summer 2018

Math 510A: Preliminary Exam Preparation for Graduate Students, Instructor
> Summer 2015, Summer 2016

Programming

- I regularly use `Sage` in my research, and contribute to `Sage` development.
- I have written tens of thousands of lines of code in `Go`, `Javascript`, and `Python` and built several web applications, including an online math homework system.

Awards and grants

2018	Best Poster, Algebraic Number Theory Symposium XIII
2017	Kazanci Fellowship, University of Washington
2014	Academic Excellence Award, University of Washington
2013	ARCS Fellowship, University of Washington
2013	Academic Merit Award, University of Washington
2012	DeCou Scholarship, University of Oregon

Conferences Attended

2018	Aug.	*MAA MathFest*, Denver, CO
2018	Jul.	*Algorithmic Number Theory Symposium XIII*, Madison, WI
2018	Jun.	*Communicating Mathematics Effectively*, Seattle, WA
2018	Apr.	*PNW MAA Section Meeting*, Seattle, WA
2018	Jan.	*Joint Math Meetings*, San Diego, CA
2017	Oct.	*Oregon Number Theory Days*, Eugene, OR
2016	June	*SaTC Workshop on Privacy and Security*, Madison, WI
2016	Mar.	*Arizona Winter School, Analytic Methods in Arithmetic Geometry*, Tucson, AZ
2016	Jan.	*Joint Mathematics Meetings*, Seattle, WA
2015	Oct.	*Western Algebraic Geometry Symposium*, Seattle, WA
2015	Aug.	*Sage Days 68*, Bellingham, WA
2015	May.	*Sage Days 64.25*, Encinitas, CA
2015	Mar.	*Arizona Winter School, Rational Points on Surfaces*, Tucson, AZ

Outreach

2018 – 2018   Tutor, Ada Developers Academy, Seattle WA
         helping women and underrepresented minorities learn to code
2015 – 2018   Member, Association for Women in Mathematics, University of Washington Chapter
         volunteering at tutoring sessions, idea workshops, and event organizing
2016 – 2018   Mentor, Washington Experimental Mathematics Lab, University of Washington
         working with groups of undergraduate researchers
2015 – 2018   Sage Workshop Leader, Math Day, University of Washington
         teaching high school students about programming and math
2015 – 2017   Volunteer, Julia Robinson Math Festival, University of Washington
         leading elementary school students through puzzles
2016 – 2016   Mentor, Google Summer of Code, University of Washington
         helping guide a project about computing with modular abelian varieties

EMPLOYMENT

2018 – (cur.)   Visiting Assistant Professor, University of California, Irvine
2018 – 2018   Software Engineer, `www.cocalc.com`
2018 – 2018   Lecturer, University of Washington
2013 – 2018   Teaching Assistant, University of Washington
2015 – 2017   Web Developer, University of Washington
2015 – 2016   Contract Web Designer, Virginia Tech
2013 – 2014   Contract Web Designer, San Diego
2012 – 2013   Math Librarian, University of Oregon