

# Travis Scholl

University of Washington      [tscholl12@uw.edu](mailto:tscholl12@uw.edu)  
Department of Mathematics   <https://tscholl12.github.io/website/>  
Seattle, WA 98195, USA        U.S. Citizen  
Last Updated: July 25, 2018

---

## 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, Summer 2018

Math 126: Calculus III, Teaching Assistant

Fall 2016

Math 125: Calculus II, Instructor

Summer 2014, Summer 2015, Summer 2016, Summer 2017

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 – 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