

# Carsten Sprunger

## Curriculum Vitae

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- EDUCATION**
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|------------------------|-------------------------|-------------------------|
| University of Michigan | Mathematics PhD Program | (Fall 2019-)            |
| Stanford University    | Mathematics PhD Program | (Fall 2017-Summer 2018) |
| University of Michigan | B.S. Honors Mathematics | (Fall 2013-Winter 2017) |
- HONORS**
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|---|--------------------------|
| NSF Graduate Research Fellowship            | (Stanford, 2018-present) |
| Stephen Smale Mathematics Award             | (U of M, 2017)           |
| Phi Beta Kappa                              | (U of M, 2017-present)   |
| The W. and M. Cornwell Prize in Mathematics | (U of M, 2017)           |
| Jack McLaughlin Award in Algebra            | (U of M, 2016)           |
| Keeler Mathematics Scholarship              | (U of M, 2013-2017)      |
| Jean Fairfax Scholarship                    | (U of M, 2013-2017)      |
| Helfman Scholarship                         | (U of M, 2013-2017)      |
- RESEARCH**
- Williams College Mathematics REU (Summer 2016)**
- Studied a random matrix ensemble, studied the connection between random matrix theory and  $L$ -functions, and studied MSTD sets
  - Gave two talks at Young Mathematicians Conference at Ohio State University
  - *Random matrix ensembles with split limiting behavior*, accepted for publication in *Random Matrices: Theory and Applications*
  - *The bidirectional ballot polytope*, accepted for publication in *Integers*
- University of Michigan Mathematics REU (Summer 2015)**
- Studied the Hurwitz problem concerning combinatorial data associated with branched covers of Riemann surfaces
  - Gave two talks at Young Mathematicians Conference at Ohio State University
- LSU Center for Computation and Technology REU (Summer 2014)**
- Worked on a program for modeling geometric flows on surfaces (e.g., mean curvature flow)
  - Gave poster presentation at Summer Undergraduate Research Forum at LSU
- WORK**
- Radiant Geospatial Solutions (Ypsilanti, MI) (Nov. 2018 - May 2019)**
- Position: Software Developer - Research
  - Work on SAR imaging and geospatial intelligence
- Course Assistant (Stanford University) (2017 - 2018)**
- Calculus and Group Theory
  - Responsibilities included: office hours, grading
- Course Assistant (University of Michigan) (2015 - 2017)**
- Honors mathematics sequence (analysis & linear algebra)
  - Responsibilities included: grading, office hours, preparing and giving weekly seminar on topic of my choice