# Henri Drake, Research Specialist I at Princeton University



7 Edgehill St. • Princeton, NJ. 08540 • Phone: (415) 244-8829 • Fax: (415) 292-7247 • E-Mail: henrifdrake@gmail.com

### Education

#### Haverford College, United States

Aug. 2011 - May 2015

- Bachelor of Science, Magna Cum Laude, Honors Major in Mathematics
- Cumulative GPA: 3.827

#### Lund University, Sweden

Jan. 2014 - June 2014

• Study abroad in graduate level mathematics program

### Research Experience

Princeton University

June 2015 - Present

• Investigating Southern Ocean upwelling pathways for Prof. Jorge Sarmiento's group using both Eulerian and Lagrangian methods with output from GFDL general circulation models (advised by Dr. Adele Morrison) and objective mappings of inferred velocity fields from Argo floats (advised by Dr. Alison Gray)

#### Haverford College

Summer 2014 - Spring 2015

- Researched theoretical knot theory, making significant progress towards a correspondence between two classes of knots, under mentorship of Prof. Josh Sabloff
- Wrote a senior thesis titled "Geodesic Paths in Phylogenetic Tree Space" under mentorship of Prof. Elizabeth Milicevec

#### University of Southern California

Summer 2013

- Researched error-correction techniques for well-connected graph optimization problems such as the traveling salesman on the D-Wave II quantum computer under mentorship of Prof. Daniel Lidar
  - Awarded \$4500 grant for interdisciplinary research by Howard Hughes Medical Institute

#### Clarkson University

Summer 2012

• Designed and built an in-situ automated total nitrogen sensor for surface waters in Prof. James Bonner's engineering laboratory

### Presentations, Conferences, and Workshops

• Poster presentation in Past, Present, Future Climate session of Ocean Sciences	February 2016
• Oral presentation in Princeton University's Ocean Biogeochemistry seminar series	February 2016
Participated in Lagrangian Ocean Modeling workshop at Imperial College London	September 2015
• Oral and poster presentation (public) for Haverford College senior Math thesis	May 2014

## Teaching Experience

Teaching assistant at Haverford College Math Question Center (MQC)	Fall 2015
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• Tutor for Multivariate Calculus and Linear Algebra at Haverford College Fall 2012 - Spring 2013