

1 Education

PhD Candidate. Mathematics. University of Groningen, Groningen, Netherlands.

MS. Mathematics. Western Washington University, Bellingham, USA: 2016.

BS. Mathematics. Cum Laude. Western Washington University, Bellingham, USA: 2014.

BA. Economics. Magna Cum Laude. Western Washington University, Bellingham, USA: 2014.

2 Publications

Hansen B, Noguchi K. Improved short-term point and interval forecasts of the daily maximum tropospheric ozone levels via singular spectrum analysis. *Environmetrics*. 2017;28:e2479. <https://doi.org/10.1002/env.2479>.

3 Presentations

Bourgain's Sharp Threshold Theorem. Guest Lecture. Utrecht University. December 2017.

Shannon's Noisy Channel Theorem and Linear Codes. Master's Project. Western Washington University. May 2016.

Forecasting Ambient O₃ Concentration Via Singular Spectrum Analysis. American Geophysical Union's Fall Meeting. December 2015.

Percolation Theory and Harris's Theorem. Senior Project. Western Washington University. June 2014.

Stable Matching and Market Design. Western Washington University. December 2013.

4 Honors and Awards

Outstanding Graduate Student. Western Washington University Math Department. 2016.

Elias Bond Graduate Fellowship. 2015.

Richard Green Graduate Scholarship. 2015.

Meritorious Team (Top 10%). COMAP International Modeling Competition. 2014.

Richard Greene Undergraduate Putnam Fellow. 2013.

2nd Highest Score on the Putnam Exam Score of Western Washington University Students.

5 Experiences

5.1 Teaching

Teaching Assistant: Discrete Fourier Analysis: Combinatorics and Percolation, Functions and Series, Probability and Statistics, Calculus, Pre-Calculus, Algebra.

University Tutor: 2010-2014.

Supplemental Instructor: 2011.

U-Talent Supervisor: 2017.

Oversaw the implementation of a Mastermind solving algorithm by high school students.

5.2 Administrative

Co-organizer: 3rd STAR Workshop on Random Graphs. Utrecht, Netherlands. January 2017.

Organizer: Annual Department Fundraiser. Bellingham, USA. March 2016.

5.3 Technical

Programing Languages: R, Python, Matlab, Stata, Mathematica.

Simulations in Large Dynamic Graphs: Simulated bootstrap percolation for a Voronoi diagram.

5.4 Professional

HIPAA Compliance Project Manager Haggen, Inc. 2015.

Financial Analyst Haggen, Inc. 2014 – 2015.

Analytics Team Leader Washington State Democrats Coordinated Campaign. 2012.