

Ryan C. Theisen

Education

- Spring 2017 **B.S. Mathematics**, *Arizona State University*, Tempe, Arizona, *GPA: 4.0*.
B.S. Economics, *Arizona State University*, Tempe, Arizona, *GPA: 4.0*.
Dean's List (All Semesters)
President's Scholar

Experience

Professional

- 2016–Present **Amazon.com**, *Data Analyst*, Tempe, AZ (Remote).
Implemented and analyzed experiments for process improvement throughout the Customer Service network. Used statistical techniques such as regression analysis to advise staffing decisions for network of over 2,000 customer service agents.
- 2016–Present **Veratox, LLC**, *Co-Founder, Director of Data Science*, Tempe, AZ.
Co-founded technology consultancy specializing in data science and web design. Contracted with Senator Jeff Flake to handle all campaign web services and data analytics. Contracted with The Wolff Company to design advanced predictive software for real estate investment. Software includes implementation of numerous machine learning techniques, such as deep neural nets, clustering, and dimension-reduction.
- 2016–Present **The Luminosity Lab**, *Researcher*, Arizona State University.
Work on team of top graduate and undergraduate students to design and develop new technologies to improve the student experience. Projects include building an interactive data map using D3.js for the 2017 ASU GSV Summit, developing a dynamic ranking algorithm for the competition website Mindspark.io, and developing scheduling algorithms for various drone applications.
- Summer 2016 **Amazon.com**, *Operations Intern*, Seattle, WA.
Worked on project to hire remote, unscheduled associates for temporally variant spikes in customer service calls. Used various statistical techniques to develop predictive models for flexibility in the customer service network.
- 2014–Present **Department of Economics**, *Teaching Assistant*, Arizona State University.
Wrote original material and taught weekly recitation sections covering topics in Intermediate Microeconomics. Held lab sessions of supplemental instruction for students in Principles of Microeconomics, often covering material for audiences of over 40 students.
- Fall 2015 **Apriva**, *Statistical Analyst*, Scottsdale, AZ.
Served as company's only statistical analyst, using a number of techniques to analyze business performance. Created index of client businesses' performance using principal component analysis from consumer transaction data.

Research

- Summer 2015 **Asymptotic Flocking for the Three-Zone Model**, *NSF Research Experience for Undergraduates*, Arizona State University.
Awarded stipend of \$5,000 as a part of National Science Foundation grant for research in applied mathematics. Constructed differential equation model of attraction-repulsion-alignment system for biological applications and proved original theorem regarding convergence of system to stationary-state solution. Presented working paper at Joint Mathematics Meetings in Seattle, January 2016. Paper submitted for publication.

2016–Present **Indexing the Accessibility of US Cities for the Physically Disabled**, Arizona State University, Director: Rodolfo Espino.
Building index of relative accessibility of US cities for the physically disabled. Working with census data and using a number of statistical techniques including principal component analysis.

Other

2016 **Lambda Chi Alpha Fraternity - Zeta Psi Chapter**, *President*, Arizona State University.
Elected to lead chapter of over one hundred members and manage a budget of more than \$150,000 annually. Personally organized two philanthropy events: one benefiting cancer research, raising over \$5,000 in inaugural year, the other raising over 100,000lbs of food for a local food bank.

2012–Present **Kino Border Initiative**, *Volunteer / Group Founder*, Nogales, Mexico.
Founded club that leads student groups to Nogales, Mexico to educate them on immigration-related issues. Taught seminar on immigration and income inequality at annual Summit on Human Dignity at local high school.

Awards and Honors

Summer 2014 **Fulbright Scholarship**, *UK Summer Institute for Young American Student Leaders*, University of Bristol, England.
Awarded highly competitive scholarship to study and increase awareness between British and American cultures. Traveled to the United Kingdom fully funded to study the history and legacy of the trans-Atlantic slave system. Conducted research and completed project on trade within West Africa during the mid-eighteenth century.

2016 **J.P. Morgan Chase Scholar**, *Arizona State University*, Department of Economics.
Awarded prestigious fellowship for top economics undergraduates. Granted stipend and recognized at 53rd annual ASU/JP Morgan Chase Economic Forecast Luncheon in front of over 1,100 business and civic leaders.

Advanced Coursework

Graduate

Real Analysis (I and II), Linear Operators, Probability and Stochastic Processes, Nonparametric Statistics, Multivariate Statistical Analysis.

Undergraduate

Topology, Advanced Calculus, Linear Algebra, Econometrics, Advanced Honors Macroeconomics, Advanced Honors Microeconomics.

Self-Study

Elements of Statistical Learning by Hastie, Tibshirani and Friedman; *Introduction to Machine Learning with Python* by Muller and Guido

Conferences

January 2016 **Joint Mathematics Meetings**, *A Model of Flocking in Three Zones*, Seattle, WA, References: 1116-VC-2224, 1116-VC-2741.

Papers

Submitted Motsch, S., Reamy, A., Theisen, R., Stokes, M.; *Asymptotic Flocking for the Three-Zone Model*.

1424 S Terrace Rd. – Tempe, Arizona 85281

☎ (480) 323 5944 • ✉ ryan.theisen@asu.edu • 🌐 ryantheisen.com

2/3

Working Paper Theisen, R., Helms, T.; *Indexing the Accessibility of US Cities for the Physically Disabled.*

Skills

Programming Python, R, L^AT_EX, SQL, MATLAB, HTML, CSS, Javascript

Languages English, Spanish (elementary proficiency)

Areas Machine Learning and Predictive Analytics, Applied Mathematics, Statistics, Web Design, Database Design

Interests

Green Bay Packers, Mountaineering, Rock Climbing, Golf, Arsenal FC, The West Wing, Monetary Economics, Ancient History, Traveling