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Ryan C. Theisen

Education

2018 **M.A. Mathematics**, *Arizona State University*.

2017 **B.S. Mathematics, B.S. Economics**, *Arizona State University*.

Phi Beta Kappa, Summa Cum Laude, GPA: 4.0/4.0

Awards and Honors

Fulbright Scholarship, *University of Bristol, England*, UK Summer Institute for Young American Student Leaders.
Researched economic drivers of trans-Atlantic slave trade during mid-eighteenth century.

Dean's Medal - Mathematics, *Arizona State University*.
Awarded as top graduating senior in School of Mathematical and Statistical Sciences.

Dean's Medal - Economics, *Arizona State University*.
Awarded as top graduating senior in Department of Economics.

Moeur Award, *Arizona State University*.
Granted highest University-wide academic award at graduation.

J.P. Morgan Chase Scholar, *Arizona State University*, Department of Economics.
Awarded prestigious fellowship for top economics undergraduates.

Experience

Professional

2016–Present **Amazon.com**, *Data Analyst*, Tempe, AZ (Remote).
Build statistical models in Python and R to aid in staffing plan of over 2,000 customer service associates. Designed and implemented scheme to use voluntary time-off to generate over 7% flexibility in service levels on a 48 hour basis, now regularly used throughout Amazon customer service. Built optimization program used to optimally staff customer service sites.

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.

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 ASU student experience. Projects include designing a dynamic ranking algorithm for the competition website Mindspark.io and developing smart mirror technologies.

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.
Teaching Assistant for Intermediate Microeconomics and Principals of Microeconomics.

Fall 2015 **Apriva**, *Statistical Analyst*, Scottsdale, AZ.
Served as company's only statistical analyst, using a number of techniques to analyze business performance.

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 **Assessing the Economic Prosperity of Persons with Disabilities in American Cities**, Arizona State University, Director: Paul Lewis.
Developed index of economic prosperity for persons with physical disabilities in American cities. Worked with census data and used 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.

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.

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

Deep Learning by Goodfellow and Bengio; *Elements of Statistical Learning* by Hastie, Tibshirani and Friedman; *A Book of Abstract Algebra* by Pinter

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.*

Working Paper Theisen, R., Helms, T.; *Assessing the Economic Prosperity of Persons with Disabilities in American Cities.*

Skills

Programming	Python, R, Julia, LaTeX, SQL, MATLAB, HTML, CSS, Javascript
Languages	English, Spanish (elementary proficiency)
Areas	Machine Learning, Applied Mathematics, Statistics, Economics, Web Design, Database Design

Interests

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