

# Elliott B. Evans

1221 Prospect St, Ann Arbor, MI 48104

☎ (443) 676-7617

| ✉ evanselliott1@gmail.com

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## Profile

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- Strong background in mathematics including coursework in linear algebra and multivariate calculus.
- Graduate coursework covering mix of statistical frameworks: parametric/nonparametric & Frequentist/Bayesian.
- Well versed in programming languages such as R and SQL, with experience in Python.

## Education

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### UNIVERSITY OF MICHIGAN

Ann Arbor, MI

M.S. IN APPLIED STATISTICS (EXPECTED APR. 2018)

Sep. 2016 - PRESENT

- GPA: 4.0/4.0
- 2016 – 2017 Outstanding First Year Masters Student Award
- Graduate Student Instructor (Teaching Assistant), Introduction to Statistics and Data Analysis
- GSI Mentor in charge of new GSI onboarding and administrative responsibilities
- Full tuition awarded for Fall 2016 – Present

### NORTHWESTERN UNIVERSITY

Evanston, IL

B.A. IN STATISTICS & MATHEMATICS, MINOR IN COMPUTER SCIENCE

Sep. 2011 - June 2015

- GPA (Statistics): 3.9/4.0
- MENU Program (Mathematical Experience at Northwestern University, Honors Mathematics Program)
- Dean's List

## Professional Experience

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### US Census Bureau - Education, Demographic, Geographic Estimates Branch

Suitland, MD

SURVEY STATISTICIAN INTERN

June 2017 - August 2017

- Analyzed results of empirical Bayesian kriging on income-to-poverty ratios (IPR) for US public schools.
- Utilized ArcGIS software to detect extreme IPR cases across US.
- Helped detect possible disclosure problems in spatially interpolated demographic estimates.

### OptionsHouse (Now part of E\*TRADE) - Online brokerage for stock & options trading

Chicago, IL

JR. BUSINESS INTELLIGENCE ANALYST

June 2015 - July 2016

- Designed and implemented C5.0 decision tree model to forecast future user value.
- Provided data-driven analysis on user trading behavior and customer segmentation.
- Manipulation of MySQL and PostgreSQL databases to produce insight from millions of data points.

### NumberFire - Data-driven sports analysis and news

CONTRIBUTING WRITER

June 2014 - Sep. 2014

- Provided data-centric baseball content for site.

### STATS LLC - Global leader in sports information, technology & content

Northbrook, IL

OPERATIONS STATISTICIAN

June 2013 - Sep. 2013

- Provided baseball pitch type analysis for MLB and NPB (Japanese) games.

## Teaching Experience

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### University of Michigan, Department of Statistics

Ann Arbor, MI

GRADUATE STUDENT INSTRUCTOR (TEACHING ASSISTANT)

Fall 2016 - PRESENT

- GSI for STATS 250 - Introduction to Statistics and Data Analysis
- Teach three lab sections (90 - 120 students total) per semester
- GSI Mentor responsible for onboarding new GSIs and lab material preparation
- GSI Mentor responsible for our learning management system (E-Coach) and technology help

Winter 2017

Fall 2017

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|  [elliott-evans](https://github.com/elliott-evans)

## Projects

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### INFERENCE-BASED AND PREDICTIVE ANALYTICS

- Identified spatial patterns in Michigan high school graduation rates using Bayesian hierarchical spatial models.  
– Report: [https://github.com/elliotttevens/spatial\\_project/blob/master/tex/final\\_project.pdf](https://github.com/elliotttevens/spatial_project/blob/master/tex/final_project.pdf)
- Estimated probability of heart disease using Bayesian logistic regression.  
– Report: [https://github.com/elliotttevens/biostat682umich/blob/master/final\\_project.pdf](https://github.com/elliotttevens/biostat682umich/blob/master/final_project.pdf)
- Presidential Election 2016 forecasts using nearest-neighbor algorithms and parameter estimation.  
– Project Site: [https://elliotttevens.github.io/election\\_forecasts/](https://elliotttevens.github.io/election_forecasts/)
- Analyzed socio-economic achievement gaps in mathematics testing via hierarchical linear modeling.  
– Report: [https://github.com/elliotttevens/HLM/blob/master/final\\_project.pdf](https://github.com/elliotttevens/HLM/blob/master/final_project.pdf)
- Measured value of pitch-framing skill in MLB using run expectancy matrix and Pythagorean expectation.  
– Report: [https://github.com/elliotttevens/pitch\\_framing/blob/master/final\\_paper.pdf](https://github.com/elliotttevens/pitch_framing/blob/master/final_paper.pdf)
- Baseball Hall of Fame Predictor using multi-dimensional Gaussian models.  
– Project Site: [https://elliotttevens.github.io/MLB\\_HOF\\_Predictor/](https://elliotttevens.github.io/MLB_HOF_Predictor/)

### RELATIONAL DATABASES

- Created map-based dynamic web application plotting Federal Election Commission data using Oracle database.
- Designed database-backed dynamic web app. simulating portfolio management via historical stock information.

## Programming Languages

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R, SQL, SAS, MATLAB, PYTHON, C, C++, C#, PERL, HTML/CSS