

Technical Skills

Programming Languages: R (>2000hours); Python (>600 hours), Matlab (>300 hours), HTML & CSS (>200 hours)

Database Knowledge: SQL, MongoDB

Frameworks/libraries: the Hadley universe of R packages, D3.js, Dimple.js, GraphLab, Pandas, NumPy, Sklearn, Theano, TensorFlow, Matplotlib, Seaborn, Shiny, quantmod, markovchain, forecast, DEoptim.

Reporting and version control: git, github, R Markdown, Jupiter Notebooks

Applications: Microsoft Office Suite, Tableau, SPSS, SR Eyalink, AMOS.

Statistics/Machine Learning Experience

Graduate Research Assistant, Binghamton University, Binghamton, NY; August 2010-2016

- Designed, executed, programed, analyzed, and reported findings from over three dozen behavioral experiments (more than 2000 experimental subjects run) through oral or written form.
- Implemented time-series analyses in processing of eye-tracking data.
- Synthesized over one thousand experimental studies in two large scale meta-analyses. [Sample](#).
- Applied prediction algorithms for behavioral data. I have employed the following modeling techniques during my work: multilevel modeling, random forests, boosted trees, regression splines, SVM, PCA, k-means, hierarchical clustering, confirmatory factor analysis, exploratory factor analysis, and structural equation modeling [Sample](#).
- Gave departmental talk on Linear Mixed Effects Regression.

Instructor, Binghamton University, Binghamton, NY; Summer 2013, 2014

- Designed a Research Methods and Statistics course from scratch and taught the course in-class during summer sessions; [Syllabus](#)

Leadership and Organizational Experience

Budget Committee, [Graduate Student Organization](#), NY, 2012-2014

- Managed and balanced a quarter million budget for over 2000 graduate students.

Editor-in-Chief, Tor Echo College Newspaper, NY, 2010

- Managed the day-to-day operations of the newspaper, including motivating and developing editorial staff, editing content, establishing connections with distributors, advertisers, community, and administration.
- Balanced and managed the budget for the newspaper.

Projects

- Examining Prosper Loan Data; see [report](#) and [repo](#).
- Comparing estimated vs. realized return for Prosper Loans; see [visualization in D3](#) and [repo](#).
- Improving user experience through A/B Testing; see [report](#) and [repo](#).
- Wrangling OpenStreetMap Data with Python and MongoDB; see [report](#) and [repo](#).
- Using machine learning to predict fraud at Enron; see [report](#) and [repo](#).

Education

Binghamton University, Binghamton, NY

- Ph.D. in Cognitive and Brain Sciences (2013-2016)
 - The focus of my dissertation was to examine how human brains integrate visual and spoken information. The R code, data, and a technical can be found on the following [link](#).
- Masters, Cognitive Psychology (2011-2013)

SUNY-Alfred, Alfred, NY

- Bachelors in Business Administration GPA: 3.98/4.0 (2007-2010)

Continuing Education:

- Data Analyst Nanodegree at Udacity (jn progress)
- Completed over three dozen courses in data science and finance through MOOCS at Coursera and EdX.
- Workshops in non-parametric testing, recurrence and fractal time-series modeling.

CFA Institute, Charlottesville, NC

- Passed all 3 levels on the first attempt, and may be awarded the charter upon completion of the required work experience