ROSS BROWN, PH.D.  [ross.brown.data.science@gmail.com](mailto:ross.brown.data.science@gmail.com) 7737937542

Los Angeles

[ rossbrownphd/](https://www.linkedin.com/in/rossbrownphd/)[ RossBrownPhD](https://www.github.com/RossBrownPhD)

DATA SCIENTIST

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

PDF-XChange Editor DEMO

**EDUCATION**

Springboard   
Data Science   
Career Track   
2018

University of   
Illinois   
Chicago

Ph.D.   
Measurement,   
Evaluation,   
Statistics and   
Assessment 2010

**SKILLS**

General   
Assembly   
Data Science;   
Python   
Bootcamp 2017

Bradley   
University   
BS Journalism, Journalism   
Photography

**SUMMARY**

I am a data scientist with additional skills in frequentist statistics, research and study design, business writing and presentation, and high-level consulting, with particular depth of expertise in education and high-stakes medical testing. I design, conduct, and interpret data-driven research and analyses for

clients.

**DATA ANALYSIS AND VISUALIZATION:** Python, pandas, numpy, plotly, cufflinks, matplotlib, scikit-learn, and seaborn.

**STATISTICS:** Machine learning, inferential and Bayesian concepts and methods, psychometric theory and methods (Rasch and classical),   
hierarchical linear modeling

**COMMUNICATION:** Business and scientific writing and editing, presenting at business and research conferences, leading task-oriented workshops, presenting and advising at board meetings

**CONSULTING:** High-level advising for the development, administration and analysis of high-stakes testing programs,

ad hoc technical consulting and research relating to statistical and psychometric issues.

**EMPLOYMENT**

ROSS BROWN DATA SCIENCE AND PSYCHOMETRICS Los Angeles Data Scientist and Psychometric Consultant April 2016 to Current

Consultant to the American Board of Professional Neuropsychology (ABN) for its multi-year project to update the ABN Written Exam Program. The project   
plan I developed ensures that test development and scoring procedures align with the *Standards for Educational and Psychological Testing,* and are   
appropriate for ABN’s resources.

Advised The Finished Product, Dumfries, Va., as it identified the challenges and potential solutions facing a home-schooling group that sought to launch a   
norm-referenced K-12 testing program.

Advised Membean, Inc., as it developed a plan to analyze and interpret the performance of its multidimensional K-12 vocabulary learning items.   
Consultant for The American Board of Venous and Lymphatic Medicine in assessing different scoring methods.

PSI SERVICES LLC Los Angeles Senior Psychometrician April 2014 to March 2016 Psychometrician and consultant for certification testing programs. ♦ Psychometric work: job analysis, item writing and exam drafting workshops, standard

setting, and CTT equating. ♦ Client management work: planning and implementing program improvements. ♦ Business development work: developing SOWs for new projects, developing proposals for project bids.

MEASUREMENT INCORPORATED Chicago Senior Psychometrician Jan. 2005 to March 2014 Conduct ad hoc research and analysis, and provide consulting expertise on issues such as possible disclosure of exam content, the implications of changes to

exam format, scoring exams that inadvertently gave the answers to questions to subgroups of candidates, and all aspects of launching new testing programs. Guide and instruct lay people on different statistical concepts and methods to develop cut scores for written exams; and develop and validate content, and train and calibrate examiners for performance assessments.

Implemented one-parameter and many facet statistical psychometric models for the analysis and equating of exams and performance assessments.

INTERNET START-UPS AND BUSINESS MAGAZINES Chicago Freelance marketing writer and editor, graphic designer, business journalist, and managing editor Jan. 1997 to Aug. 2001 Wrote and edited research reports, press releases, speeches, white papers, case studies, articles, emails and newsletters. Wrote and edited business magazine

news and feature articles. ♦ As managing editor of business magazines, I managed staff, budgets, editorial development and production.   
**PROJECTS**

[CAN WINTER SEVERITY PREDICT ADMISSIONS FOR ALCOHOLISM TREATMENT?](https://github.com/RossBrownPhD/Capstone_1_Final_-Submission) March 2018 Research ties alcoholism to seasonal affective disorder (SAD), a depressive mood disorder associated with seasonal winter weather. I created a pilot study for a network of alcoholism treatment centers to see if they could predict patient treatment demand -- and thereby manage staffing needs -- based on the severity of a given winter season, as measured by an index from the National Weather Service.