

E: BDV dot Web plus ol at gmail dot com

P: On Request

W: sites.lsa.umich.edu/BrianVickers

Northern Virginia, DC Metro

US Citizen

Decision neuroscientist applying behavioral science on how people think and behave to inform clients; develop, benchmark, and test human-in-the-loop systems; and communicate findings to subject matter and technical experts as well as general audiences.

PROGRAMMING Python, R, MATLAB, SQL, NoSQL, APIs

DATA SCIENCE Machine learning (carat, sklearn), visualization (ggplot2, plot.ly, bokeh, D3), lexical analysis, wrangling, web processing, version control, predictive analytics

METHODS Mixed and hierarchical models, surveys & item response theory, structural equation modeling, reliability, psychophysiology

ECONOMICS Preference modeling, conjoint analysis, decision analysis

RESEARCH STAFF MEMBER

5/2019 – Present

Institute for Defense Analyses, Operational Evaluation Division

- ◆ Consulted on a range of computer, human-assistance, and other programs for sponsors
- ◆ Developed statistical, processing, AI, and other trainings for general audiences

SENIOR ANALYST

8/2018 – 5/2019

Maritz Motivation Solutions, Decision Sciences

- ◆ Converted infrastructure **data lakes into centralized, business-friendly structures** for fast, efficient machine learning—model deployment shifted from months to weeks
- ◆ Developed **interactive, Java-based tools** for non-technical team members to incorporate evidence into RFP strategy, leading to increased RFP conversion rates

POSTDOCTORAL RESEARCHER

5/2016 – 5/2018

University of Michigan, Emotion and Self-Control Lab

- ◆ Saved 1000+ man-hours **efficiently using rolling joins** on time-sampled data
- ◆ Prepared, modeled Facebook **social media data** from messy and missing
- ◆ Created analysis **pipelines for ETL on > 10 TB 4D time-series volumetric fMRI data**

POSTDOCTORAL RESEARCHER

7/2015 – 5/2016

University of Michigan, Ecological Neuroscience Lab

- ◆ Increased the **efficacy of donation campaigns** via individual tailoring, $d = [0.3, 0.8]$
- ◆ **Developed and deployed intervention**, reducing Ebola anxiety by 8%
- ◆ Presented 29 talks for groups of 30 – 300 local, national, and **international audiences**

GRADUATE RESEARCHER, INSTRUCTOR, STATISTICAL CONSULTANT

8/2009 – 7/2015

University of Michigan, Cognition and Cognitive Neuroscience

- ◆ Used focus groups to fix study designs, **saving over \$50,000** in fMRI studies
- ◆ Attained median 5/5 on student ratings for **communicating statistics** to Ph.D. students
- ◆ Tested over 4,000 people and **managed teams of 2-12 people** of varying experience levels

EDUCATION

2018, July	The Data Incubator, Washington, D.C.; <i>2% acceptance rate program in data science</i>
2015, July	Ph.D., M.A., Cognition and Cognitive Neuroscience, University of Michigan
2008, June	B.A., Psychology & Philosophy with honors, University of California, Santa Cruz