

## Skills

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### STATISTICAL SOFTWARE

- **R:** *caret, glmnet, lm, glm, lme4, dplyr, ggplot2*
- **Python:** *pandas, NumPy, matplotlib, scikit-learn*
- **Stata**
- **SPSS**
- **SAS**
- **PostgreSQL**

### DATA ANALYSIS

- **Regression:** *multiple, logistic, generalized*
- **Multilevel Models**
- **Structural Equation Modeling**
- **Mediation/Indirect Effects**
- **Support Vector Machines**
- **Artificial Neural Networks**
- **Principal Component Analysis**
- **K-Nearest Neighbor**
- **Random Forests**
- **Cross Validation**
- **Regularization:** *lasso, ridge, elastic net*
- **Bootstrapping**

## Experience

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### BRANDEIS UNIVERSITY – Waltham, MA

#### Lab Team Member, Laboratory for Biological Health Psychology

08/2010 - 01/2012,  
08/2014 - Present

- Analyze associations between psychological factors and cortisol reactivity to and recovery from acute stress using hierarchical growth curve modeling.
- Perform CLIA and ELISA assays to determine salivary and/or plasma serum concentrations of cortisol, alpha-amylase, and interleukin-6.
- Collaborate with colleagues in writing publications for academic journals.
- Present research at academic conferences in poster and talk formats.
- Train undergraduate lab members in research and wet lab methods.
- Designed and carried out a study investigating the role of coping in human physiological responses to acute stress.

#### Graduate Teaching Fellow, Department of Psychology

01/2015 - 06/2018

*Courses: Advanced Psychological Statistics I-II, Applied Hierarchical Linear Models, Research Methods, Social Psychology, Health Psychology, Introduction to Psychology*

- Taught statistics, research methods, and other course content during office hours.
- Graded papers, projects, and tests.

### ALEXDATASCI.COM – Personal Website

#### Creator and Operator

08/2018 - Present

- Write summaries of data analysis and machine learning side projects.

### MAYO CLINIC – Rochester, MN

#### Analyst, Biomedical Ethics Research Program

08/2012 - 06/2014

- Analyzed quantitative and qualitative data using Stata and NVivo software.
- Screened and extracted data from electronic medical records.
- Collaborated with principal investigators in writing publications related to ethical considerations of genomics, internet usage, and deep brain stimulation

## Education

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### BRANDEIS UNIVERSITY – Waltham, MA

#### PhD Psychology Candidate (*ABD*)

Expected 05/2019  
01/2012

#### MA, Psychology

### CARLETON COLLEGE – Northfield, MN

#### BA, Psychology (*cum laude*)

06/2008