

# Chelsea Gordon, PhD

## Learning and Data Scientist

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### Education

#### Ph.D. Cognitive & Information Sciences, University of California, Merced

2019 Dissertation Topic: Influences of embodied experience on cognition and learning

#### B.S. Psychology, Minor in Cognitive Science, Michigan State University

2013 Graduated Magna Cum Laude

Research Topic: fMRI lab assistant studying social and affective neuroscience

### Experience

#### Learning Scientist, Kidaptive

2019 - 2020 Redwood Shores, CA

- ❖ Designed gamified cognitive tasks to measure student learning enabling our client to release a digital assessment environment for early education language skills.
- ❖ Simulated learner behavior using R to validate content recommendation algorithms allowing us to reduce the number of questions needed for assessments.
- ❖ Modeled student test-taking and studying data for partner companies to generate student feedback.
- ❖ Interfaced with partner companies, engineers, and product group to implement features in educational games and diagnostics that have launched in beta.
- ❖ Developed NLP scripts in R and Python to predict exam question difficulty.
- ❖ Presented design plans, data analysis, and competitor landscape to internal and partner executives.
- ❖ Built handwriting assessment prototype using Google Cloud to assess feasibility.
- ❖ Earned a promotion in four months for exceeding role expectations.

#### Graduate Researcher, UC Merced

2014 - 2019 Merced, CA

- ❖ Designed and conducted experimental research leading to 15 peer-reviewed publications:
  - Assessed memory, learning, and behavior with [mouse- and finger-tracking](#) experiments on PCs and mobile devices.
  - Developed VR games to study [immersive language learning through object interaction](#).
  - Investigated the effects of movement on learning using dynamic measures of brain activity. [Watch a video of me applying TMS](#) or [read about how our muscles help us hear music](#).
- ❖ Performed 100s of hours of exploratory data analysis on dozens of different kinds of data to identify trends and shape hypotheses.
- ❖ Defined and executed rigorous hypothesis tests using statistical best-practices.
- ❖ Supervised research assistants, mentored junior grad students, and collaborated with an interdisciplinary network of peers.
- ❖ Presented findings in video, at conferences, and in journals to communicate the importance of the motor system for language, learning, and memory.

#### Graduate Teacher, UC Merced

2015-2018 Merced, CA

- ❖ Teaching Fellow: Developed a syllabus and taught course content, assessed progress, created assignments and activities for cognitive neuroscience.
- ❖ Teaching Assistant: Assisted in seven courses in cognitive science, led discussions and labs.
- ❖ Graduate Statistics Tutor: Helped graduate student researchers apply statistical methods

### Skills

Experimental Design, Cognitive Task Design, Survey Design, A/B Testing, Qualitative Analysis | Regression Analyses, Data Visualization, Linear Mixed Models, Nonlinear Data Analyses, Latent Trait Models, Behavioral Modeling/Simulation, Machine Learning (svm, random forests, pca) | R (ggplot2, tidy, lme4, rvest, xml, text2vec, dplyr, tm), python (numpy, sklearn, pandas), SQL, Javascript, HTML, CSS | RStudio, Spyder, Git, Unreal Engine, Jupyter, Windows, Linux, MacOS, VirtualBox | Multimodal Data Analysis, Mouse/Touch Tracking, Eye Tracking, TMS, EEG, EMG, fMRI, Meta-Analysis, Virtual Reality