

(603) 520-2897



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## **EDUCATION**

Ph.D. – Psychology University of Arizona

Minors: Cognitive Science

Computational Social

Sciences

M.A. - Counseling Psychology University of New Hampshire

B.A. – Psychology University of New Hampshire

Minor: Fine Arts

A.A. – Visual Communications Art Institute of Pittsburgh

#### **PROFICIENCIES**

Coding & Software Development Mental Health Treatment Experimental Design Project Management Communication & Presentation Goal-Driven Leadership

#### 6+ vears

Python & R Quantitative & Qualitative Statistics Machine Learning

Database Integration & SQL Bayesian Inference Longitudinal Data Analysis

# **LINKS**



https://bit.ly/eandrews-data



https://bit.ly/eandrews-linkin

#### RELEVANT WORK EXPERIENCE

### RESOURCE SUPPORT SPECIALIST - THE UNIVERSITY OF ARIZONA ....... 2024/06 - CURRENT

Managed data collection, storage, and analysis for real-world psychological research studies using longitudinal participant data with over 1.4 million data points. Queried and curated data that was provided to other members of the research staff.

Skills Used: Coding & Software Development, Database Integration & SQL, Longitudinal Data Analysis, Project Management, Python & R

#### PH.D. CANDIDATE – THE UNIVERSITY OF ARIZONA

... 2018/08 - 2024/06

Developed a cross-platform smartphone app to gather naturalistic, longitudinal data on psychological traits and measures of conscious thought. Responsible for UI design, programming, implementation, and testing. https://www.MindWindowApp.com

Skills Used: Coding & Software Development, Database Integration & SQL, Experimental Design, Longitudinal Data Analysis, Project Management, Python & R

Designed, maintained, and queried a database system for the management and storage of experimental data. A NoSQL framework was used for production and a MySQL development copy was used for queries and analysis. As of 2023/06, the database maintains nearly 1,000,000 variable entries for over 5,500 participants.

Skills Used: Coding & Software Development, Database Integration & SQL, Project Management, Python & R

Organized broad areas of information to teach advanced coursework. Dynamically presented material in a collaborative learning environment and facilitated communication strategies at both the individual and group-level. Utilized progress metrics to optimize comprehension and enhance knowledge retention.

Skills Used: Communication & Presentation, Goal-Directed Leadership, Project Management

Provided evidence for precision mental health by identifying relationships between psychological states in everyday life and traits of well-being using intensive longitudinal experience sampling data along with hidden Markov modeling.

Skills Used: Longitudinal Data Analysis, Machine learning, Python & R, Quantitative & Qualitative Statistics

Reduced uncertainty in an area of clinical research by evaluating how patterns of everyday thought can cluster individuals into meaningful groups and identify potential moderators of psychological well-being in a study with over 2,200 participants. Unsupervised machine learning and natural language processing were used to provide quantitative and qualitative findings.

Skills Used: Bayesian Inference, Machine learning, Python & R, Quantitative & Qualitative Statistics

Leveraged causal prediction models to identify connections between characteristics of thought and psychological well-being using naturalistic thought data from 1,200 participants.

Skills Used: Bayesian Inference, Python & R, Quantitative & Qualitative Statistics

Evaluated how cooperation can be assisted through AI on a DARPA-funded experiment. Performed psychophysiology acquisition (EEG, fNIRS, skin conductance, ECG, and eye-tracking), data pre-processing/analysis, and supervised research assistants. Initial findings and dataset were accepted into a premier neuroscience and machine learning conference.

Skills Used: Communication & Presentation, Experimental Design, Goal-Directed Leadership, Machine Learning, Project Management

Presented findings at numerous conferences on preliminary analyses based on linear regression, logistic classification, and multivariate mediation approaches.

Skills Used: Communication & Presentation, Python & R, Quantitative & Qualitative Statistics

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Developed a Python framework to compile and standardize meta-analytic data from over 1,400 participants from 27 studies.

Skills Used: Communication & Presentation, Python & R, Quantitative & Qualitative Statistics

**Developed Python and MatLib scripts** to gather reaction time and psychophysiological data for both online and in-person experiments.

Skills Used: Experimental Design, Python & R

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**Performed feasibility tests** in the prediction of subjective emotional states from sparse neuroimaging data by completing an initial collaborative filtering machine learning analysis.

Skills Used: Machine Learning

**Surveyed reactions to emotionally-provocative images** using cloud resourcing and a web-based experiment designed using Python and MySQL. Completed preliminary data analysis using R.

Skills Used: Coding & Software Development, Database Integration & SQL, Experimental Design, Python & R

#### CLINICAL MENTAL HEALTH THERAPIST – ERIC ANDREWS, LCMHC .............. 2013/08 - 2017/09

**Established an independent business** and managed all operational aspects including advertising, services, legal obligations, billing, and accounting.

**Skills Used:** Communication & Presentation, Mental Health Treatment, Project Management, Goal-Directed Leadership

**Provided psychotherapy services** to clients suffering from mental health disorders by using an integrated humanistic and CBT approach. Specialized in anxiety and stress-related disorders.

Skills Used: Mental Health Treatment, Goal-Directed Leadership

**Designed and developed a commercial software application** for mental health providers for scheduling as well as for the management of all aspects of client documentation and billing. https://www.infiniteline.com/psychbook.php

**Skills Used:** Coding & Software Development, Communication & Presentation, Database Integration & SQL, Project Management

"No one is useless in this world who lightens the burdens of another."