Eric Andrews PhD, MA, LPC

(603) 520-2897

eric@infiniteline.com

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

12+ years
- Coding & Software Development
- Mental Health Treatment
- Health Care Systems
- Experimental Design
- Project Management
- Communication & Presentation
- Goal-Directed Mentorship

8+ years
- Python & R
- Quantitative & Qualitative Statistics
- Machine Learning

5+ years
- Database Integration & SQL
- Bayesian Inference
- Longitudinal Data Analysis

LINKS

https://bit.ly/eandrews-data

https://bit.ly/eandrews-linkin

PROFESSIONAL SUMMARY

Data scientist and licensed clinician (Ph.D. in Psychology, LPC) with experience in Python, R, and SQL and in applying machine learning to longitudinal and multimodal data to improve mental health care.

Manages data collection and analyses for numerous studies including one that has gathered ~10 million data points from over 8,000 participants and that required building a custom mobile app for data acquisition.

Able to bridge cross-discipline perspectives — drawing on clinical training and experience partnering with computer science and research teams — to effectively turn clinical questions into rigorous, testable analyses with a focus on precision mental health and public health impact.

RELEVANT WORK EXPERIENCE

POST-DOCTORAL RESEARCHER – NORTHEASTERN UNIVERSITY ..... 2025/01 - PRESENT

Apply statistical learning methods to real-world longitudinal experience sampling data to identify time-related dynamic connections between variables that have relevance to precision mental health.

Present research findings to both departmental and international audiences at colloquia and conferences.

Support departmental research teams through collaborative data analysis, leading training sessions, and spearheading discussions regarding novel research directions.

SCIENTIFIC ANALYST – THE UNIVERSITY OF ARIZONA ..... 2024/06 - PRESENT

Provide analysis-ready research data from over 8,000 participants and approximately 10 million data points for real-world psychological research studies. Use NoSQL and SQL queries to extract JSON/text-based data as well as Python to curate data for individual research and for other members of the research staff.

Maintain and update mobile application code using JavaScript, Kotlin, and Swift to provide additional services to the research team and to provide compatibility with advancing system requirements.

CLINICAL MENTAL HEALTH THERAPIST – ERIC ANDREWS, LPC ..... 2005/08 - PRESENT

Use project and organizational skills to run all operations of an independent business including advertising, service provision, compliance, legal obligations, billing, and accounting.

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

Program and maintain a software application for mental health providers to manage client documentation and billing. Responsibilities include all aspects of research, design, and implementation/development. (PsychBook CMS, 2010 to present)

PH.D. CANDIDATE – THE UNIVERSITY OF ARIZONA ..... 2018/08 - 2024/06

Developed a smartphone app for iOS and Android that gathers naturalistic, longitudinal data on psychological traits and measures of conscious thought. Responsible for UI design, programming, implementation, and testing. *https://www.MindWindowApp.com*

Designed, maintained, and queried a NoSQL database system and data pipeline for the management and storage of experimental data. Stored and retrieved document-based data in JSON format. A MySQL development copy was used for queries and analysis.

Designed and taught advanced coursework and dynamically presented material in a collaborative learning environment. Facilitated communication strategies at both the individual and group-level. Utilized progress metrics to optimize comprehension and enhance knowledge retention.

Provided evidence for precision mental health and connections between behavioral patterns and psychological well-being by identifying hypothesis-driven and data-driven relationships between psychological states in everyday life and traits of well-being using intensive longitudinal

experience sampling data. Various analyses included the use of hidden Markov modeling, unsupervised machine learning, Bayesian inference, natural language processing, and causal prediction models.

Evaluated how cooperation can be assisted through the use of AI-based behavior prompts on a DARPA-funded experiment. Performed psychophysiology acquisition (EEG, fNIRS, skin conductance, ECG, and eye-tracking) and data pre-processing/analysis as well as partnering with computer science staff and the supervision of research assistants. Initial findings and dataset were accepted into a premier neuroscience and machine learning conference.

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

PSYCHOLOGICAL RESEARCHER – UNIVERSITY OF DENVER ..... 2017/09 - 2018/08

Used Python and MATLAB to compile and standardize meta-analytic data from 27 studies (1,400+ participants) as well as to collect behavioral and psychophysiological data.

PSYCHOLOGICAL RESEARCHER – DARTMOUTH COLLEGE ..... 2015/01 - 2017/01

Facilitated experimental designs and procedures by gathering survey reactions to emotionally-provocative images using a Python and MySQL-based web interface with cloud storage. Additionally, completed initial feasibility tests of a collaborative filtering machine learning analysis of sparse neuroimaging data.

EDUCATION

PHD – PSYCHOLOGY, UNIVERSITY OF ARIZONA ..... 2018/08 - 2024/08

Minors: Cognitive Science, Computational Social Sciences

MA – COUNSELING PSYCHOLOGY, UNIVERSITY OF NEW HAMPSHIRE ... 2001/08 - 2005/05

Minors: Cognitive Science, Computational Social Sciences

BA – PSYCHOLOGY, UNIVERSITY OF NEW HAMPSHIRE ..... 1999/08 - 2001/05

Minor: Fine Arts

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

— Charles Dickens