Eric C. M. Chantland

Kentwood, MI ⁘ (231) 492-7302 ⁘ TheChantland.com ⁘ EricChantland@gmail.com

Experienced (6+ years) full-stack developer in human analytics. Skilled in developing intricate software design for user data collection and data analysis. Quick and independent learner of software frameworks to fit collaborators' needs. Proficient in working both as a project lead and an instrumental member of any team.

Skills

Full-stack developer specializing in cognitive assessment (using Python, JavaScript, Matlab, E-prime, and Qualtrics) ⁘ Quantitative and qualitative data analysis (using Python, R/Rstudio, SPSS, Matlab, and Excel) ⁘ Database management (MySQL, SQLite) ⁘ API (FastAPI) ⁘ Machine learning algorithms ⁘ Software development in Unix and windows based environments ⁘ Unit/system/user-acceptance testing ⁘ Research design development.

Education

M.A. in Cognitive Psychology – Michigan State University (May 2022)

Thesis: Preference for Control is Consistent Across Probability and Size of Reward Outcomes.

GPA: 3.933

B.S. in Psychology – Michigan State University (December 2016)

GPA: 3.671

Projects

EEGExtract – A python library for extracting features from Electroencephalography (EEG) data. Actively maintained and used by several researchers worldwide.

Dice_Me – Convert image to a dice mosaic using scikit-learn to determine optimal feature preservation.

FastAPI-Dice-App – Integrating an API using the Dice_Me project. Uses a relational database (SQLite), API (FastAPI), Python, JavaScript, CSS, and HTML.

CVT_Logistic_Analysis – MATLAB library implementing per-subject binary logistical regression analysis.

Relevant Certifications

Java Programming and Software Engineering Fundamentals (Ongoing)   Coursera – Duke

  Programming Foundations with JavaScript, HTML and CSS

  Java Programming: Solving Problems with Software

Web Design for Everybody Specialization (August 2022)   Coursera – University of Michigan

  Introduction to HTML5

  Introduction to CSS

  Interactivity with JavaScript

  Advanced Styling and Responsive Design

  Capstone

Javascript Algorithms and Data Structures (July 2022)   FreeCodeCamp

Python for Everybody Specialization (June 2022)   Coursera - University of Michigan

  Programming for Everybody

  Python Data Structures

  Using Python to Access Web Data

  Using Databases with Python

Experience

Graduate Research Assistant – Michigan State University

August 2018 – May 2022   Cognitive Control Neurolab, Principal Investigator: Susan Ravizza.

August 2018 – May 2022   Neuroimaging of Perception and Attention Lab, Principal Investigator: Taosheng Liu

- Built and deployed research experiments via Python, JavaScript, Matlab, E-Prime, and Qualtrics which allowed for testing research questions on demographics both within and outside the greater Lansing area.
- Problem solved and methodically troubleshooted experiment-based software to manage user misconceptions and operating errors.
- Recorded then analyzed data to discover trends via Python (Numpy, Pandas, Scikit-learn), R/Rstudio, SPSS, Matlab, EEGLAB, and Excel.
- Managed large data sets, prepared data assessments, and presented summarized data analytics at collaborator meetings, thereby aiding in clarity and recommending changes to projects' design.
- Served as team leader for groups of up to 8 undergraduate research assistants in recruiting participants, facilitating experiments, staffing assistants, and recording clean data.

Graduate Teaching Assistant – Michigan State University

August 2018 – May 2022

- Tutored, lectured, graded, and created coursework for classes of 30 to 500 people.
- Guest lectured on complex methods of testing attentional templates by summarizing and effectively simplifying concepts for a predominately novice audience.

Research Manager – Michigan State University

August 2017 – August 2018   Neuroimaging of Perception and Attention Lab, Principal Investigator: Taosheng Liu

January 2017 – August 2018   Attention and Perception Lab, Principal Investigator: Mark Becker

- Programmed 10+ experiment software via Matlab and E-Prime to match with principal investigators' current needs then coordinated researcher assistants to acquire data promptly.
- Assisted in the conception and development of 15+ experiments devised by the principal investigator and graduate students.
- Concurrently managed multiple research laboratories of up to 8-person teams of researchers. Staffed and trained and researchers in experiment design where at least 2 researchers created their own studies under my and the principal investigator's guidance.
- Analyzed and assessed data via SPSS, Excel, and Matlab then distributed technical reports at meetings.

Undergraduate and Post-Bachelors Research Assistant – Michigan State University

January 2017 – August 2017   Neuroimaging of Perception and Attention Lab, Principal Investigator: Taosheng Liu

August 2016 – January 2017   Attention and Perception Lab, Principal Investigator: Mark Becker

August 2016 – May 2017   Twin Registry, Principal Investigator: Alexandra Burt

August 2015 – May 2016   Morality Intergroup Relations Lab, Principal Investigator: Carlos Navarrete

- Aided in recording qualitative and quantitative data such as emotional responses, psychomotor data, behavioral accuracy, and reaction time.
- Independently conceived, programmed, and analyzed (SPSS and Excel) novel research on motivated target search detection including 3 total experiments of more than 120 subjects each.