

Colby N. Reyes

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I am a health and wellness advocate, a data nerd, and above all a lifelong learner. I love utilizing my skills and knowledge base to improve others' lives — especially in the areas of physical and mental health — through data and technologies that empower people to take control of their health.

EDUCATION

UC Irvine

M.S., Informatics

SEPT 2020 - DEC 2021

Irvine, CA (US)

» GPA: 3.97

Wheaton College

B.S., Applied Health Sciences

AUG 2013 - MAY 2017

Wheaton, IL (US)

» Physics minor

» GPA: 3.89

Awards & Honors

» Engineering Scholarship

» President's Scholarship

» Applied Health Sciences Department Critical Thinking Award

» Graduated Summa Cum Laude

PUBLICATIONS

Abstracts

C. Reyes, N. Thom, H. Thomas, N. Varberg, M.P. Herring, M.J. Campbell. Effects of acute aerobic exercise on ocular measures of emotion processing during an emotional face perception task. Poster presented at: Society for Neuroscience. 2017, November 11-15; Washington D.C.

Manuscripts

N.J. Thom, M.J. Campbell, **C. Reyes**, et al. Effect of Acute Aerobic Exercise on Ocular Measures of Attention to Emotionally Expressive Faces. *Int.J. Behav. Med.* 28, 372–381 (2021). <https://doi.org/10.1007/s12529-020-09927-z>

C. Reyes, K. Zheng, D. Hanauer. Design, implementation, and usability of the Electronic Medical Record Search Engine (EMERSE) tool. *AMIA Annu Symp Proc.* 2022. (in press)

RESEARCH EXPERIENCE

Research Assistant

MAY 2021 - PRESENT

Informatics Department, UC Irvine, CA

Research Mentor: Dr. Kai Zheng, PhD

- » Developed and executed a 3- phase usability study protocol to evaluate the EMERSE platform in collaboration with faculty at the University of Michigan
- » Conducted interviews with over 45 individuals from various institutions across the country
- » Effectively implemented python code to transcribe interviews using Google Cloud Platform (GCP) Storage and Automatic Speech Recognition (ASR) API modules in python
- » Performed NLP text feature extraction using python scikit-learn and NLTK modules to facilitate semi-automated qualitative data analysis
- » Efficiently executed data transformation and statistical analyses of text feature data, interface interaction event data, and survey response data
- » Extracted insights from statistical analyses and effectively transformed them into written communications in the forms of a thesis and an academic journal article

EEG and Eye-Tracking Data Analysis

JAN 2015 - NOV 2017

Biology Department, Wheaton College, IL

Research Mentor: Dr. Nate Thom, PhD

- » Assembled an interdepartmental collaborative team to create a novel eye-tracking analysis software with the purpose of organizing data and calculating specific parameters to understand the interactions of exercise and emotional response
- » Led group to accomplish long-term (8 weeks) goals to develop analysis pipeline for EEG data
- » Trained future group leader in order to pass along best practices in the lab and maintain project momentum
- » Presented study results at the 2017 Society for Neuroscience conference in Washington, D.C. and coauthored manuscript published in the International Journal of Behavioral Medicine

WORK EXPERIENCE

Research Contractor

MAR 2022 - PRESENT

Spellbound Inc, Irvine, CA (US)

- » Performed exhaustive literature searches across multiple databases for various proprietary projects
- » Efficiently filtered results down to most relevant publications and consolidated results into a personalized structured database
- » Provided executive summaries of hundreds of research articles to enhance digestibility by product development team

Warehouse Associate

OCT 2018 - SEP 2020

Target Corporation (Target Distribution Center 551), Fridley, MN (US)

- » Safely and efficiently transported and loaded products—including operating heavy machinery, loading and unloading pallets, and organizing and stacking boxes up to 50lb—for distribution to local stores
- » Became trained as Point of Contact (POC) — typically a position reserved for senior employees—within only months of hire
- » As POC, coordinated and directed coworkers, in cooperation with Operations Manager,

to send out trailers on time and maintain optimal speed and performance of operations while minimizing burden on team members

Independent Contractor

JUL 2018 - DEC 2018

Lawndale Christian Health Center, Chicago, IL (US)

Remote work base: Coon Rapids, MN (US)

- » Attained approval from CEO to become one (of less than 10) of Lawndale's remote contract employees based upon one year worth of contribution to the Clinical Applications team
- » Provided graphical interface and Medicallogic Expressive Language (MEL) coding expertise on a project-to-project basis to ensure excellent development of Electronic Medical Record forms and components
- » Delivered timely and effective consultation on numerous projects beyond specifically assigned work in order to convey expertise to fellow employees

Health IT Intern

JUL 2017 - JUL 2018

Lawndale Christian Health Center, Chicago, IL (US)

- » Provided EHR support to 500 staff with excellence to ensure user satisfaction
- » Coded in Medicallogic Expressive Language (MEL) to develop new forms that increased the efficiency of various clinical, technical and administrative workflows
- » Collaborated with clinical operations and administration to launch a new online portal software to enhance clinic- patient communication
- » Strategically developed electronic form translation for the pilot Adult Day Services program to simultaneously ensure ease of access to documented records and comprehensive capturing of relevant data
- » Streamlined a previously cumbersome process of requesting clinical letters by creating a sizable library of global variables and function buttons to compile text in real-time rather than relying on static letter texts
- » Trained clinical support staff in effective use of the Electronic Medical Record system to uphold cohesive functioning of clinical operations

Physical Therapy Intern

JUN 2016 - AUG 2016

Sports Conditioning and Rehabilitation, Orange, CA (US)

- » Created new daily workout and rehabilitation regimens for patients to improve physical conditioning and enhance or restore joint mobility and muscle stability in recovery from

injury or surgery

- » Cared for patients by implementing basic treatments such as icing and laser therapy to increase the Physical Therapists' efficiency in seeing patients and facilitate patient recovery
- » Supervised patients in performing exercise and rehabilitation routines, allowing the Physical Therapists to see multiple patients within the same time frame

Adventure Ministry Leader

MAY 2015 - AUG 2015

Wheaton College (IL) - HoneyRock, Three Lakes, WI (US)

- » Obtained 6 weeks of facilitative leadership training, culminating in a 4 week leadership practicum and 2 weeks leading Wheaton Passage focused on facilitating academic and introspective conversations within groups
- » Completed Wilderness First Responder (WFR) certification and trained in multiple staged triage and individual care scenarios to ensure capacity to maintain camper safety on wilderness expeditions

SKILLS & SPECIALIZATION

Research & Data Analysis: Quantitative and Qualitative Research Methods, Effective Data Visualization, Research and Academic Writing

Programming & Software: Python, MATLAB, Git and GitHub, BASH, Linux, MacOS, Windows, Citrix, Jira

Healthcare: Clinical Informatics, Prior certifications in Wilderness First Responder (WFR), CPR and First Aid; Physical Therapy Exercises

Leadership: Facilitative Leadership Training; Software User Training

Office & Administrative: Technical Support with JIRA for agile workflow; Remote Work; Citrix Environment; MS Office: Word, Excel, Powerpoint, OneNote; LaTeX

INTERESTS

Research Interests

- » Data Science: Efficient data mining and analysis; Text mining methods; Optimized EHR

database structure for analytics and clinical effectiveness

- » Clinical Informatics: Clinical judgment assistance; Data-driven integrative medicine; Data mining and machine learning within EHRs for personalized medicine; EHR design
- » Neuroscience: Interactions of physiology and behavioral psychology
- » Epidemiology and Public Health: Population health trends and effective interventions at the community, state, national, and global levels

ACTIVITIES

Self-Directed Learning

FEB 1994 - Present

Everywhere Possible

Coursera

University of Michigan

- » Python for Everybody >> [*completed*]
- » Python Basics >> [*completed*]
- » Python Functions, Files, and Dictionaries >> [*completed*]
- » Python Data Structures >> [*completed*]

University of London

- » Introduction to Computer Programming >> [*completed*]

Medical Shadowing & Volunteer

MAR 2015

Wheaton College Breakaway Ministry, Wichita, KS (US)

Shadowing

- » Dr. Panokos, DO, General practice in Derby, Kansas
- » Dr. Flesher, MD, Pulmonologist (ICU, hospice, clinic) Via Christi, St. Francis
- » Dr. Voth, MD, OB-GYN, St. Theresa location w/ Via Christi
- » Dr. Wolfe, MD, OB-GYN, Maternal Fetal Medicine, Clifton Family Medicine Clinic location of Via Christi

Volunteer

- » Worked 2 days at World Impact free clinics

Community Service

Annual service trip

2013 - 2016

Pine Trail Camp, Saugatuck, Michigan (US)

- » Prepared camp facility for following year's use by performing grounds maintenance including heavy weeding, firewood preparation, and facility painting

WEBSITES

Work Samples

- » [Portfolio](#)

Research Labs

- » [Health and Information Lab](#)
- » [Thom Brain Hygiene Lab](#)