Nathan Werrede

San Diego, CA — nwerrede@ucsd.edu — (714) 470-9055 linkedin.com/in/nathanwerrede — github.com/nathanwerrede

EDUCATION

University of California, San Diego

La Jolla, CA

B.S. Cognitive Science with Specialization in Design and Interaction

August 2017- December 2019

• Minor in Computer Science

Santa Monica College

Santa Monica, CA

August 2015 - June 2017

General Education

o Dean's Honor List

• Honors at Graduation

• Relevant Coursework: Software Tools and Techniques (CSE 15L), Data Science in Practice (COGS 108), Mathematics for Algorithms and Systems Analysis (CSE 21), Interaction Design (CSE 170), Advanced Data Structures (CSE 100), Design and Analysis of Algorithms (CSE 101), Brain Computer Interfaces (COGS 189), Usability and Information Architecture (COGS 187A), Human Computer Interaction (COGS 121)

EXPERIENCE

Keck Institute for Space Studies, California Institute of Technology

Pasadena, CA

Institute Intern

Summer 2014

- Assisted with coordination and implementation of lectures, workshops, and short courses on related space topics
- Audited website for dead links and bugs, and updated institute website using HTML and CSS through Adobe Dreamweaver

Projects

• Kinect for Cognitive and Physical Performance:

- Implemented the Kinect 2.0 camera and API with two exercises designed as part of an at-home physical therapy solution
- One exercise records and conditions reaction time while the other is an implementation of Simon Says that tests a user's memory, with both visual and audio cues

• EEG Prosthetic Hand Actuation:

- Combined the NeuroSky MindWave Mobile EEG headset and Python to interpret collected brainwave signals that would change a 3D-printed, motorized prosthetic hand's grip based on participant's brain activity
- o Motor was controlled through an Arduino board receiving input from computer and headset

• Restaurant Rating Data Analysis:

- Utilized the Yelp API in Python by sorting and mapping San Diego area restaurants by rating to determine the highest rated food category of each neighborhood for potential opening locations of a business
- Responsible for data visualizations of San Diego neighborhoods and restaurant locations

• Achievement Challenger Web App:

- Designed a mobile-oriented web app made with HTML, CSS, and JavaScript where users can create, save, and view different challenges for video games, that are extreme variations of achievements
- Fully functional prototype using LocalStorage as a simulated backend to display user-created challenges

SKILLS

• Languages: C++, C, Java, Python, HTML, CSS, JavaScript, MATLAB Technologies: Unix, Git, MacOS, Windows