

# ALEXANDRA HERNANDEZ

(951) 595-9228  
[alexavndrarh@gmail.com](mailto:alexavndrarh@gmail.com)  
[arh003@ucsd.edu](mailto:arh003@ucsd.edu)

San Diego, CA  
92122

## EDUCATION

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**BS** University of California, San Diego Sept 2021-Present  
Majoring in *Machine Learning and Neural Computation* (BS)  
Minoring in *Computer Science*  
3.7 GPA

## HONORS AND AWARDS

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Marshall Provost Honors Jan 2021-Present  
Awarded to students earning at least a 3.5 GPA during the school year

## EXPERIENCE

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Scripps Institution of Oceanography Aug 2023-Present  
Data Management Assistant

- Working and processing data submissions from SIO researchers and cruises using Excel and CSV files with Python and existing file scripting.
- Running programs within the Linux environment to re-configure data by reordering records, inserting placeholders and values, and concatenation to upload on the remote databases with virtual environments.
- Monitoring project website and database wikis, as well as data feedback from outside institutional researchers (e.g. Cal Poly San Luis Obispo laboratories).
- Documenting datasets with JSON programming, including inputting appropriate metadata and uploading them to existing repositories using Bash commands and Secure File Transfer Protocols (SFTP).
- Working with SQL, Bash commands, and SSH tunneling procedures to ensure that submitted data is publicly available.
- Maintaining project websites, research bibliographies, and data sourcing.

UC San Diego Extended Studies June 2023-Aug 2023  
Python Tutor

- Taught high school students Object-Oriented Programming in Python; course equivalent to CSE 6R at UC San Diego.
- Hosted daily lab hours to help students complete Stepik exercises and other class assignments, stemming from variable values to Python packaging.
- Collaborated with 7 other student mentors, as well as Professor Moshiri and TA Sabeel Mansuri in helping create Stepik assignments for students.

- Tested Professor Moshiri's Stepik exercises before releasing to students.

Qualcomm Institute UC San Diego

Sept 2022-Aug 2023

WordPress Developer

- Worked on website structuring/maintenance, program consultation, financial research, and data analytics/research for Qualcomm Institute's TREDs program.
- Maintained TREDs website with WordPress Elementor, PHP, HTML, and CSS languages, and worked with SEO tools for website search optimization and organization.
- Helped implement digital learning programs for EMTs and other public service workers and collected/analyzed data from such programs for supervisors and researchers.
- Created and maintained program presentations for training classes for EMTs, public service workers, and TREDs investors.
- Facilitated contact submission for website with Google Cloud API's emailing system, solving a long-standing issue of submission errors within the organization.
- Completed several rounds of DOT dataset analysis and research for research/training courses.

WalkMe UC San Diego

May 2022-Sept 2022

Data Analyst

- Worked on frontend development, data analytics, and digital implementation for WalkMe programs at UC San Diego.
- Used jQuery, HTML, CSS, JavaScript, and DAP programming to create WalkMe implementations for UC San Diego digital platforms.
- Maintained WalkMe website presence on the UC San Diego main website with Content Management Systems (CMS).
- Prototyped and tested digital navigation guides implemented on UC San Diego platforms such as Canvas, EcoTime, and Blink for maintenance and pre-launch purposes.
- Worked with user requests and coordinated with business stakeholders in investing with WalkMe and UC San Diego implementations.
- Analyzed and collected data obtained from navigational guides to help implement more changes and/or features, and created data visualizations to help analyze most frequented parts of such digital platforms.
- Used JIRA for managing team software implementation with UC San Diego, as well as cross-collaboration among team members and supervisors.
- Involved automation techniques within navigational guides to ensure sufficient usage for students, faculty, and staff.
- Complied navigation guides and their implementations with 508 accessibilities.

## TEACHING EXPERIENCE

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University of California, San Diego – San Diego, CA  
Instructional Assistant, COGS 108

Jan 2023-Mar 2023

- Taught COGS 108: *Data Science in Practice*, a high-demand upper division class focused on Python data visualization, cleanup, and machine learning via group project work.
- Worked under Professor Fleischer.
- Helped run case study around Women in STEM with FA23 class.
  - Managed research readings for case study.
- Primary instructor for 9:00-10:00AM sections, helping students navigate their way through discussion labs, assignments, and project checkpoints
- Managed 25+ project groups with a fellow graduate student.
- Served as admin master for entire class.

University of California, San Diego – San Diego, CA  
Instructional Assistant, COGS 1

Jan 2023-Mar 2023

- Taught COGS 1: *Introduction to Cognitive Sciences*, an undergraduate course averaging 300 students per quarter, covering the interdisciplinaries of Cognitive Sciences.
- Developed quizzes, exams, and section work.
- Coordinated grading and labs with a team of 4 IAs/TAs.

## PROFESSIONAL TRAINING

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SPIS

UC San Diego, San Diego, CA, Aug 2021-Sept 2022

*Preparatory summer program catered towards incoming Computer Science, Data Science, and Machine Learning majors. Headed by Professor Moshiri, Professor Gillespie, and Professor Schrugers, and under the guidance of several mentors, they taught Python, HTML, CSS, data visualization, and machine learning models via Visual Studio Code, GitHub, and Repl.it developing environments. By the end of the program, students pair programmed different apps and other programs together for a final presentation.*

## PROFESSIONAL AFFILIATIONS

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Cognitive Sciences Department UC San Diego, 2023-Present

Worked as an Instructional Assistant for *Introduction to Cognitive Science* and *Data Science in Practice*

Associated Students UC San Diego, 2021-2023

Worked as the Environmental Justice Affairs' *Social Media and Marketing Associate* and Academic Affairs' *Media Manager*

## COMMUNITY SERVICE

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Liam O'Mara for Congress – Lake Elsinore, CA

Jul 2020-Mar 2021

*Head of Social Media and Student Outreach*

- Created campaign content for social media handles (e.g. Instagram) and managed content output.
- Coordinated with other staff members in organizing canvassing and public town halls for candidate to meet with constituents.
- Managed campaign presentations and video decks for candidate to work on.
- Managed 30+ student interns and organized text and phone banking for them to do, especially during peak days and national holidays (e.g. 4<sup>th</sup> of July).

Loma Linda University Medical Center – Murrieta, CA

Aug 2019-Mar 2020

*Front Desk Receptionist*

- Created campaign content for social media handles (e.g. Instagram) and managed content output.
- Coordinated with other staff members in organizing canvassing and public town halls for candidate to meet with constituents.
- Managed 30+ student interns and organized text and phone banking for them to do, especially during peak days and national holidays (e.g. 4<sup>th</sup> of July).

## LANGUAGES

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English: Native Language

Spanish: Intermediate Listener, Novice Speaker, Advanced Reading and Writing

## PROJECTS

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University of California, San Diego – San Diego, CA

Oct 2022-Present

*alexavndra.github.io*

- Website portfolio that showcases my work experience, skills, and who I am as a career person and technical employee.
- Programmed with HTML, CSS, and JavaScript, and uses git version control to continuously update the website with new materials.

University of California, San Diego – San Diego, CA

Aug 2023-Sept 2023

*PAUSE App*

- Group project aimed to help make menopause education and connection accessible to all communities, especially low income POC communities, with in-app forums and tracking, as well as educational articles and advice when tackling menopause.
- Done with Figma to help visualize a high-fidelity prototype of the app, which consisted a dashboard tracking menopausal symptoms, as well as several windows inviting users to interact/chat with other “meno-PAUSE-rs” about their menopause journeys.

University of California, San Diego – San Diego, CA

Apr 2023-June 2023

*Digital Art Keywords*

- Data science research project from COGS 108: *Data Science in Practice* that analyzes the relationship between caption keywords and DeviantArt content using data visualization models, machine learning algorithms/predictors, and Python.
- Utilized DeviantArt API to scrape content data and created several new data frames to help visualize the correlation of keyword frequency and their popularity (based on likes, comments, and follows)
- Harbored on Jupyter Notebooks and maintained workflow with git version control.
- Worked with Python web scraping and data sourcing from DeviantArt.

University of California, San Diego – San Diego, CA

Aug 2021-Sept 2021

*Astrologify*

- Desktop console app that generated a Spotify playlist based on the user's top songs and their astrological signs, examining the genres that they frequented and cross-comparing with the genre their astrological sign tends to gravitate towards.
- Pair programming project done with UC San Diego's *SPIS* as a final project for the course.
- Programmed in Microsoft's Visual Studio with Python and utilized Spotify API (via Spotify Python packaging).
- Used machine learning algorithms such as Decision Trees to generate a mix of genres and songs for the user's playlist; training and testing set involved peers in the SPIS program.
- Utilized Spotify's OAuth tokens to create the user's playlist inside their Spotify profile, allowing for easy access and sufficient usage of the program (no need to create on their own).

Great Oak High School – Temecula, CA

Mar 2021-Apr 2021

*Reminder App*

- Java application that allows the user to create tasks, lists, and reminders within their desktop. Programmed using NetBeans IDE.
- Used EasyApp Java packaging to create the User Interface and app appearance on the user's desktop.
- Incorporated real-time date and time format to keep track of notifications/reminders that the user creates.
- Utilized Java's FileReader packaging to help the user edit, create, and delete tasks from their app and system, along with a history option to keep track of deleted tasks.

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SKILLS

Programming languages: Java, Python (including Matplotlib, Seaborn, Numpy, Pandas), MATLAB, C#, SQL, JSON, JavaScript, jQuery, HTML, CSS, PHP, VIM, Bash

Platforms: Word, Excel, PowerPoint, Microsoft Azure, Visual Studio Code, DataSpell, Microsoft Power BI, Atom

Technical applications: Work on virtual environment programming, SFTP/SCP control on remote databases, SSH tunneling, data visualizations and cleanup, machine learning models and predictors (including Lassos and Decision Trees), API package implementations (e.g. Spotify, Google Cloud, DeviantArt), user feedback and pair programming, IBM Toolchain via JIRA, and source code maintenance. Worked with HTTPS/XML protocols. Experience with web scraping and data sourcing.

Other: Very detail-oriented and extremely organized. Excellent at communicating with team members and business stakeholders, especially in high-stress settings. Minor experience with financial research for business purposes, and efficient at reaching deadlines early and/or on time. Great at working on multiple tasks and assignments.

#### WEBSITES

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Website: [alexavndra.github.io](http://alexavndra.github.io)

GitHub: [github.com/alexavndra](https://github.com/alexavndra)

LinkedIn: [linkedin.com/in/alexavndrarh](https://linkedin.com/in/alexavndrarh)

#### OTHER INFORMATION

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Dual citizenship to United States and Canada

#### REFERENCES

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**Marina Frants, CCE-LTER Advisor**

CCE-LTER

Scripps Institute of Oceanography

[mfrants@ucsd.edu](mailto:mfrants@ucsd.edu)

**Lesley Copeland, TREDs Advisor**

TREDs Qualcomm Institute

UC San Diego Health

[lcopeland@health.ucsd.edu](mailto:lcopeland@health.ucsd.edu)

**Francisco Mejia, WalkMe Advisor**

WalkMe

UC San Diego IT

[f4mejia@ucsd.edu](mailto:f4mejia@ucsd.edu)