Zoe Ludena

(858) 333-1303 | zoeludena@gmail.com | San Diego, California

EDUCATION

University of California San Diego   Expected June 2025

B.S. in Data Science; Minor in Business Economics | Cumulative GPA: 3.829/4.000

Relevant Coursework: Tutor Apprenticeship in Data Science, Principles of Data Science, Programming and Basic Data Structures for Data Science, Data Structures and Algorithms for Data Science, Theoretical Foundations of Data Science I and II, The Practice and Application of Data Science, Introduction to Data Management, Business Analytics, Systems for Scalable Analytics, Introduction to Data Visualization, Probabilistic Modeling and Machine Learning, Representation Learning

EXPERIENCE

Student Worker   Feb 2024 – Present

- A Student Worker for the Data Services department of the San Diego County Sheriff's Department.
- Use text machine learning techniques, Python, Pandas, and SQL to find singularities in continuously growing amounts of text data.
- Create pipelines using Azure to clean data incrementally, conduct sentiment analysis, and clustering.
- Create informational PowerBI Reports to identify anomalies in text data and across employees.

DSC Tutor   Apr 2023 – Present

- Tutor for Principles of Data Science Class, for Data Structures and Algorithms for Data Science, for Programming and Basic Data Structures for Data Science, and for Theoretical Foundations of Data Science I.
- Held office hours twice a week, created educational material (videos and examples), answered forum questions to help develop students understanding of class materials, wrote midterm material, transferred grades across platforms, graded assignments, mentored new tutors, and attended weekly staff meetings.
- Proficiency in VSCode, Github, Gradescope, Canvas, Python, Java, Pandas, and NumPy.

PROJECTS

Big O Explained – Interactive Visualization | Github   Mar 2024

- Programmed in a team to create an interactive visualization that would explain Big O Notation to new coders using Python and graphs.
- Coded for about 20 hours a week on the page with HTML, Javascript, Svelte, and D3.

League of Legends Model Building | Github   Jun 2023

- Pair programmed to identify a binary classification problem, create a baseline predictive model using two features, and create an improved predictive model using six features and hyper parameters.
- Cleaned a DataFrame and conducted fairness analysis using our improved predictive model using Python.
- Coded a display page with visualizations and explanations using HTML and Python to communicate findings.

League of Legends Soul Analysis | GitHub   May 2023

- Pair programmed to clean a DataFrame, used permutation tests to analyze missingness and missingness dependency, and created hypothesis tests to learn about the distribution of data.
- Coded a display page with visualizations and explanations using HTML and Python to communicate findings.

EXTRACURRICULAR/LEADERSHIP ACTIVITIES

Data Science Student Society (DS3)   May 2024 – Present

- A Professional Events Director for DS3, the largest data science organization at UCSD that aims to host events, provide resources and opportunities to students interested in all things data science.
- Attend weekly meetings with other officers, UCSD departments, and industry partners to plan and host workshops that help the data science community at UCSD grow professionally. Lead resume reviews, elevator pitch workshops, faculty mixers.

Institute of Electrical and Electronics Engineers (IEEE) - Eta Kappa Nu   Mar 2023 – Aug 2024

- An officer for the official honor society of IEEE, which promotes excellence in the profession with the ideals of Scholarship, Character, and Attitude.
- Attend weekly meetings with other officers and UCSD departments to gather funding, plan events, and provide feedback to encourage event growth. Effectively maneuvered high stress and pressured, deadline-driven work environments.

Acoustics Species Identification   Oct 2022 – Jun 2023

- A volunteer in the collaboration among Engineers for Exploration and the Population Sustainability group from the San Diego Zoo Institute for Conservation Research to improve researchers' ability to monitor smaller species' populations.
- Organized and filtered data using Python and Github.
- Attended meetings with customers and peers for three hours a week.

AWARDS/HONORS

- UCSD Provost Honors – Received in 8 consecutive quarters by maintaining above a 3.5 GPA while enrolling in 12+ units.
- IEEE - Eta Kappa Nu 2023