

# Jason D. Mulson

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## EDUCATION

### California Polytechnic State University, San Luis Obispo, CA

Current GPA: **3.44**

Bachelor of Science, Major in **Statistics**, Minor in **Data Science**

Graduation: **June 2023**

- Dean's List | December 2019, 2020, and 2021
  - Completed at least 14 letter-graded units during the quarter with at least a 3.5 GPA.
- Mentor for College of Science and Math | September 2021 – January 2022
  - Trained with Mentor Collective to effectively assist 5 incoming first-years with any issues regarding their transition from high school into college.

## RELEVANT PROJECTS

### Underwater Audio Project, San Luis Obispo, CA

January 2023 – June 2023

- Led a senior project for Cal Poly's marine research team, utilizing machine learning techniques to detect underwater animal calls off the coast of Monterey Bay, CA.
- Demonstrated strong leadership and effective coordination with team members, achieving project objectives and maintaining consistent communication with the client for a successful outcome.
- Implemented Per-Channel Energy Normalization (PCEN) during preprocessing to ensure high-quality audio data for improved model performance and aid in improved precision (36.43 percentage points) and F1 score (4.56 percentage points).
- Developed a robust pipeline, streamlining workflow across preprocessing, processing, and postprocessing stages, and successfully deployed the machine learning model on Amazon SageMaker.

### Neural Network Project, San Luis Obispo, CA

December 2022

- Compiled over 200 photos from two authors and produced a dataset with 25 features that use transfer learning and convolutional neural networks to assign an image to its respective author.
- Used oversampling and data augmentation to handle class imbalances in the data for each feature.
- Combined the 25 neural networks into one final model (Lasso Regression, Support Vector Classifier, Decision Tree, Neural Network) that predicts who took the photo.

### Home Credit Default Risk Project, San Luis Obispo, CA

November 2022

- Developed and compared models (Logistic Regression, Support Vector Classifier, and Linear Discriminant Analysis) to predict whether someone will default or not on a loan.
- Utilized feature engineering to create a finalized dataset that is simplified and usable to increase model efficiency.
- Devised a metric to determine the performance of the models in addition to accuracy, precision, recall, and F1 score.

### Database Connectivity with JDBC Project, San Luis Obispo, CA

June 2022

- Designed a Java JDBC application with a partner that implements an inn/hotel reservation system to handle multiple tasks given by the user through the command-line interface.
- Succeeded in allowing users to look up rooms and rates, make new reservations, update reservations, cancel reservations, and search reservations while accounting for and mitigating SQL injection attacks.

## WORK EXPERIENCE

### Albuquerque Mayor's Office | Office of Civic Engagement | One ABQ Volunteers – Americorps VISTA

July 2023 – Present

- Represented the Mayor's Office in interactions with departments and the public, effectively communicating the program's mission and goals, and demonstrated enthusiasm, organization, and a strong passion for community interaction.
- Developed standard operating procedures for City of Albuquerque Departments to enhance service delivery and capacity-building efforts.

### Dishwasher and Server – The Villages of San Luis Obispo

April 2023 – June 2023

- Ensured the cleanliness and sanitation of all dishes, utensils, and kitchen equipment, maintaining a high standard of hygiene for residents and staff.
- Delivered exceptional dining experiences to residents by providing courteous and attentive table service during meal times.
- Greeted residents warmly, taking their orders accurately, and maintaining proper food handling and presentation to create an enjoyable dining atmosphere.

## ADDITIONAL SKILLS

- Programming Languages (Python, R, Java, MySQL)
- Statistical Software (JMP, Minitab, SAS)
- Python Libraries (Pandas, NumPy, Scikit-learn, Matplotlib)
- Cloud Computing (AWS, SageMaker, S3)

## RELEVANT PROJECTS (Other)

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### Solar Sunrise (1998) Report, San Luis Obispo, CA

November 2021

- Researched and wrote a report on the 1998 Solar Sunrise cyber-attack.
- Collaborated with a professor from Cal Poly who was present in Washington, D.C. during the attack.
- Assessed the impacts of the attack, presented related works such as Moonlight Maze, and proposed strategies to mitigate attacks similar to Solar Sunrise from occurring in the future.

### Diabetes Classification Project, San Luis Obispo, CA

December 2021

- Created and analyzed 5 classification algorithms (Random Forest, K-means Clustering, K-nearest Neighbors, Naïve Bayes, and Neural Network) in Google Colab to predict the presence of diabetes in individuals.
- Presented Google Slides on the algorithms, how they are coded, how they were trained, and their accuracies.

## WORK EXPERIENCE (Other)

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### Yale College Prep – Math Instructor

July 2022 – June 2023

- Help students from elementary to high school improve their problem-solving and critical-thinking skills.
- Highlight areas that need more improvement and spend time strengthening those areas.
- Create assignments for the students to develop their knowledge of the topics covered.

### Home Depot – Freight Team Associate, Overnight

June 2021 – August 2021

- Communicated with partners in the same department and the entire overnight team to consistently meet deadlines and sustain the top 5 on the leaderboard of The Home Depots within the area.
- Demonstrated dedication to the team by staying after the shift for up to 2 hours to clean the store in preparation for opening the next day.

### Shopper and Driver – Instacart

June 2020 – August 2020

- Consistently achieved a 5-star rating as an Instacart Shopper and Driver by providing exceptional customer service and ensuring timely deliveries.
- Efficiently managed multiple orders simultaneously, demonstrating strong organizational and time management skills.
- Received commendations from customers for going above and beyond to accommodate special requests and preferences.