

SARA ALLALI

(714)-768-7208 sallali@chapman.edu [Sara Allali | LinkedIn](#) [Sallali02 \(Sara Allali\) \(github.com\)](#)

EDUCATION

Chapman University, California - M.S. Computational & Data Sciences Graduated May 2025

Chapman University, California - B.A. Psychology, Minor in Analytics Graduated May 2024

Relevant Coursework: Enterprise Data Management, Statistical Machine Learning, NLP, Interactive Data Analysis, Applied Business Analytics, Data Mining, Multivariate Data Analysis, Time Series Analysis, Data Structures & Algorithms, Mathematical Modeling, Data Mining, Linear Algebra and Differential Equations

TECHNICAL SKILLS

Programming & Tools: Python, R, SQL, Java, C++, Excel, Power BI, Tableau, Alteryx, Salesforce, HTML/CSS/JS, QGIS

ML & Analytics Frameworks: scikit-learn, TensorFlow, Keras, PyTorch, SHAP, SMOTE, Pandas, NumPy, dplyr, tidyverse, Matplotlib, Seaborn, ggplot2, DAX

NLP & Deep Learning: spaCy, NLTK, LSTM, CNNs, Transformers

Research & UX Tools: Qualtrics, SurveyMonkey, Typeform, MS Forms, Figma, Notion, Canva

WORK EXPERIENCE

AI Research Fellow | Klarbook, Remote July 2025 - Present

- Collaborated on a national AI research study analyzing structured & unstructured data on automation and AI trends.
- Coordinated survey outreach & data collection, ensuring high-quality and well-organized data.
- Delivered insights for a published benchmark report while gaining hands-on experience with modern AI tools.

Data and Systems Analyst Assistant | Chapman University October 2023 - May 2025

- Cleaned and analyzed large datasets, ensuring accuracy and reliability for decision-making.
- Extracted and managed data from multiple platforms to generate insights for leadership needs.
- Developed and deployed campus-wide surveys generating insights on student outcomes.
- Designed and built interactive dashboards to track student outcomes, enabling career services to evaluate post-graduation success and improve decision-making.
- Collaborated with the Data and Systems Analyst to ensure data integrity and project alignment.
- Reviewed and validated data before publishing reports to maintain consistency and accuracy.
- Supported ad hoc projects, showing adaptability and problem-solving in a data-driven setting.

RELEVANT PROJECTS

Eye Disease Classification Using Deep Learning

- Built a CNN to classify retinal images into Normal, Diabetic Retinopathy, Cataract, and Glaucoma using ~1000 images per class, leveraging deep learning for accurate disease prediction.

Computational Perspectives on Workplace Dynamics and Mental Health in the Tech Industry

- Analyzed survey data on workplace policies and mental health treatment-seeking. Built ML models to predict treatment likelihood and improve workplace support.

Subscriber Optimization for Rosetta Stone

- Analyzed subscriber data to identify factors influencing retention and engagement. Provided insights and recommendations to help Rosetta Stone improve subscription rates.

Predictive Model for Neonatal Sepsis Detection

- Built a machine learning model to identify neonatal sepsis using clinical and lab data. Achieved ROC of 0.93 and 99.8% sensitivity. Applied SMOTE to address class imbalance, improving specificity to 40.1%. Used SHAP analysis for feature interpretation and model refinement.

Song Generation with NLP and Deep Learning

- Developed an LSTM-based model to generate song lyrics using NLP techniques on a dataset of 25,000+ songs. Showcased AI's potential in creative content generation.

Adidas US Sales Analysis

- Conducted an in-depth analysis of Adidas US sales data to identify trends, optimize marketing, and pinpoint underperforming products. Leveraged Excel for pivot tables and charts, providing insights into regional and retailer performance while supporting data-driven sales forecasting.

Heart Disease Analysis and Prediction

- Analyzed and cleaned data from the UCI Heart Disease repository, focusing on 14 key attributes to identify patterns. Built machine learning models to predict the likelihood and severity of heart disease. The project aims to support early diagnosis and improve understanding of heart disease.

LEADERSHIP & INVOLVEMENT

- **Career Fair Support, Chapman University** (Spring 2024, Fall 2024, Spring 2025) - Worked alongside the team to coordinate and support the organization of one of the university's largest career fairs, facilitating employer-student engagement and ensuring event execution.
- **Giving Day Photoshoot Participant, Chapman University** (Annual Giving Programs) - Participated in promotional photoshoots for Chapman University's Giving Day, contributing to marketing efforts that support fundraising and engagement initiatives.
- **Clubs:** Girls Who Code (GWC) | Data Analytics Association

CERTIFICATIONS & HONORS

- **Certifications & Training:** Data or Specimens Only Research (CITI Program), Tableau Desktop: Speed & Performance Optimization, The Complete SQL Bootcamp: Go From Zero to Hero
- **Awards & Recognition:** Provost's List (2021-2024) | Honor's Magna Cum Laude (2024)