

# SARA ALLALI

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

## EDUCATION

|   |                    |
|---|--------------------|
| <b>Chapman University, California</b> - M.S. Computational & Data Sciences  | Graduated May 2025 |
| <b>Chapman University, California</b> - B.A. Psychology, Minor in Analytics   | Graduated May 2024 |
| <b>Relevant Coursework:</b> 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, Linear Algebra and Differential Equations |                    |

## TECHNICAL SKILLS

|   |
|---|
| <b>Programming &amp; Tools:</b> Python, R, SQL, Java, C++, Excel, Power BI, Tableau, Alteryx, Salesforce, HTML/CSS/JS, QGIS                                     |
| <b>ML &amp; Analytics Frameworks:</b> scikit-learn, TensorFlow, Keras, PyTorch, SHAP, SMOTE, Pandas, NumPy, dplyr, tidyverse, Matplotlib, Seaborn, ggplot2, DAX |
| <b>NLP &amp; Deep Learning:</b> spaCy, NLTK, LSTM, CNNs, Transformers   |
| <b>Research &amp; UX Tools:</b> Qualtrics, SurveyMonkey, Typeform, MS Forms, Figma, Notion, Canva   |

## EXPERTISE

Deep Learning | Natural Language Processing (NLP) | Statistical Analysis | Machine Learning | Supervised & Unsupervised Learning | Predictive Analytics | Data Analytics | Data Visualization | Data Engineering

## RELEVANT EXPERIENCE

|   |                      |
|---|----------------------|
| <b>Data and Systems Analyst/Coordinator</b>   Chapman University  | Aug 2025 - Present   |
| • Administer and optimize career technology platforms, enhancing data accuracy and user experience for users.   |                      |
| • Lead data integration projects, importing, exporting, and transforming complex datasets to support strategic reporting and institutional planning.              |                      |
| • Design and maintain interactive Power BI dashboards, tracking KPIs such as engagement, outcomes, and platform usage, improving data visibility by 25%.          |                      |
| • Coordinate with IT, advising, and engagement teams to ensure data alignment with university goals   |                      |
| • Develop and enforce best practices for data governance, reporting, and documentation; train staff and student assistants to enhance departmental data literacy. |                      |
| <b>AI Research Fellow</b>   Klarbook, Remote  | July 2025 - Oct 2025 |
| • Selected to join a national AI research fellowship focused on studying automation and industry trends; contributed to survey design and outreach strategy.      |                      |
| <b>Data and Systems Analyst Assistant</b>   Chapman University  | Oct 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

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

#### **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.

#### **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.

#### **Unlocking Retention – A/B Testing Player Engagement in Cookie Cats**

- Analyzed A/B test data from a mobile game to evaluate how gate placement impacted short- and long-term player retention; applied survival analysis, logistic regression, and causal inference methods in R to derive actionable insights.

## **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)
- Communication for Technical Professionals (Udemy)
- Tableau Desktop: Speed & Performance Optimization (Udemy)
- The Complete SQL Bootcamp: Go From Zero to Hero (Udemy)
- Machine Learning for Business (DataCamp)
- Dashboard Design (DataCamp)

#### **Awards & Recognition:**

- Provost's List (2021-2024)
- Honor's Magna Cum Laude (2024)