SARA ALLALI

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

EDUCATION

Chapman University, California - M.S Computational and Data Sciences — Expected: May 2025
Chapman University, California - B.A Psychology, Minor Analytics — Graduated: May 2024

RELEVANT COURSEWORK

- Enterprise Data Management
- Statistical Machine Learning
- Natural Language Processing
- Interactive Data Analysis
- Applied Business Analytics
- Data Mining
- Multivariate Data Analysis
- Time Series Analysis
- Data Structures and Algorithms
- Biostatistics
- Mathematical Modeling

TECHNICAL SKILLS

- R
- Python
- Java
- MS Excel
- SQL
- Tableau
- HTML,CSS & Javascript
- C++
- Power BI
- QGIS

WORK EXPERIENCE

Chapman University, Orange, CA — October 2023 - Present
Data and Systems Analyst Assistant

- **Cleaned and analyzed** datasets of various sizes, ensuring accuracy and reliability for decision-making.
- **Extracted and managed** data from multiple career platforms to generate insights aligned with leadership needs.
- **Designed and developed** interactive Power BI dashboards, enhancing decision-making for career services leadership
- **Assisted in survey development** for campus-wide student research, enabling data collection for key institutional insights.
- **Built dashboards to track student outcomes**, helping career services evaluate post-graduation success and program effectiveness.
- **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.

Ansar Academy, Anaheim, CA — September 2022 - Present
Teacher Assistant

- Assist in preparing and implementing age-appropriate lesson plans to support early childhood development.
- Promote children's emotional and social growth through interactive activities and positive reinforcement.
- Ensure classroom safety by adhering to health and safety protocols for a clean and secure environment.
- Provide individualized support to children with varying learning needs, fostering an inclusive classroom.

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.

Impact of Parenting Styles on Mental Health of Young Adults

- Conducted survey-based research analyzing the correlation between parenting styles and anxiety and depression in young adults. Used SPSS for statistical analysis to identify key trends.

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, EVENT AND VOLUNTEER EXPERIENCE

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.

ADDITIONAL

- **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, 2022, 2023, 2024)
  Honor's Magna Cum Laude (2024)
- **Club Organizations:**
  Girls Who Code (GWC)
  Data Analytics Association