SARA ALLALI

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

PROFESSIONAL SUMMARY

Data science graduate with a strong foundation in machine learning, statistical analysis, and data visualization. Skilled in Python, SQL, R, and Power BI, with hands-on experience across healthcare, education, and business. Proven ability to build ML models and dashboards that support data-driven decisions. Passionate about using data to solve real-world problems and drive impact.

EDUCATION

Chapman University, California - M.S Computational and Data Sciences — Graduated: 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
- Deep Learning
- 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
- Salesforce

WORK EXPERIENCE

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

- **Cleaned and analyzed** large datasets, ensuring accuracy and reliability for decision-making.
- **Extracted and managed** data from multiple platforms to generate insights aligned with leadership needs.
- **Designed and developed** interactive dashboards, enhancing decision-making for 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.
- **Developed** logistic regression models to identify key factors influencing graduates' likelihood of securing jobs or internships, supporting data-driven strategy in career services.
- **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 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 | Python, TensorFlow, Project Link
- 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.

Predictive Model for Neonatal Sepsis Detection | SQL, R, SMOTE, SHAP, Project Link
- 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 | Python, NLTK, TensorFlow, LSTM, Project Link
- 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.

Heart Disease Analysis and Prediction | Python, Scikit-Learn, Matplotlib, Seaborn, Project Link
- 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.

Multimodal AI for Radiology: Integrating Image and Text for Enhanced Captioning and VQA in Medical Imaging | Python, NLP, PyTorch, transformers, Project Link
- Developed a deep learning model integrating chest X-ray images and radiology reports using CLIP/BLIP for automated captioning and clinical Visual Question Answering (VQA) on the MIMIC-CXR dataset, enhancing diagnostic support through multimodal learning.

Automated Video Content Summarization | Python, spaCy, NLTK, Transformers, BART, Project Link
- Developed an NLP pipeline to generate concise bullet-point summaries from YouTube subtitles using the YouTube Subtitles Dataset. Fine-tuned transformer models (BART/T5) with Hugging Face to perform text summarization, leveraging Python, spaCy, and NLTK for preprocessing.

LEADERSHIP AND 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.

Club Organizations
- **Member**, Girls Who Code (GWC) and Data Analytics Association

CERTIFICATIONS AND 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, 2022, 2023, 2024)
  Honor's Magna Cum Laude (2024)