

SARA ALLALI

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EDUCATION

Chapman University <i>Masters of Science in Computational and Data Sciences</i>	Aug 2023 - May 2025
Chapman University <i>Bachelors of Arts in Psychology, Minor Analytics</i>	Aug 2020 - May 2024

EXPERIENCE

Klarbook AI Research Fellow	Jul 2025 - Present
<ul style="list-style-type: none">Collaborated on a national AI research study analyzing industry trends in automation and AI.Coordinated data collection through structured outreach and survey methods, ensuring accurate and organized real-world data.Contributed insights to a published benchmark report and gained hands-on experience with modern AI tools and methodologies.	
Chapman University Data and Systems Analyst Assistant	Oct 2023 - May 2025
<ul style="list-style-type: none">Cleaned and analyzed data to ensure accuracy and support data-driven decision-making.Developed interactive Power BI dashboards to enhance strategic insights for leadership.Assisted in survey design for campus-wide research, enabling insights into student experiences.Ensured data integrity through validation and collaboration; supported ad hoc projects as needed.	

SKILLS

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

Libraries & Frameworks: Scikit-learn, TensorFlow, Keras, Statsmodels, SHAP, SMOTE, Pandas, NumPy, dplyr, tidyverse, NLTK, spaCy, LSTM, CNN, Transformers, Matplotlib, Seaborn, GGplot

PROJECTS

Predictive Model for Neonatal Sepsis Detection SQL, R, SMOTE, SHAP, Project Link
<ul style="list-style-type: none">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.
Profit Analysis and Departmental Insights SQL, Power BI, DAX, Project Link
<ul style="list-style-type: none">Analyzed departmental profitability and resource allocation. Merged multi-table datasets to assess budgets, salaries, and project revenues. Built an interactive dashboard to visualize salary distributions, project status, and department-level financial performance.
Multimodal AI for Radiology Python, NLP, PyTorch, Transformers, Project Link
<ul style="list-style-type: none">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.

LEADERSHIP AND INVOLVEMENT

Career Fair Support, Chapman University (Spring 2024, Fall 2024, Spring 2025)
<ul style="list-style-type: none">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)
<ul style="list-style-type: none">Participated in promotional photoshoots for Chapman University's Giving Day, contributing to marketing efforts that support fundraising and engagement initiatives.