

# TIFFANY LE

(714) 331-6473 • [tifle@chapman.edu](mailto:tifle@chapman.edu) • [LinkedIn Profile](#) • [Github and Website](#)

## EDUCATION

Chapman University, School of Engineering, Orange, CA

**Bachelor of Science in Data Science, Minor in Leadership Studies**

May 2025

**Masters of Science in Electrical Engineering and Computer Science**

May 2026

### Relevant Courses:

Data Structures and Algorithms, Database Management, Introduction to Data Science, Applied Business Analytics, Machine Learning, Artificial Intelligence, Technical Communication

## TECHNICAL SKILLS

Python, SQL (MySQL), Java, Machine Learning, Data Science, Database Management, Data Modeling, Statistical Inference/Analysis, Artificial Intelligence, TensorFlow, Keras, Numpy, PyTorch, Spark, SciKit, Matplotlib, Deep Learning

## PROFESSIONAL EXPERIENCE

**Student Research Assistant (Wen Lab)** | Chapman University - Orange, CA July 2024 - Present

- Develop data fusion algorithms for health monitoring and patient outcome prediction using clinical data
- Conduct literature reviews on various advanced machine learning techniques (network compression, data fusion, and accuracy preservation), contributing to the study's methodologies and paper
- Co-author of an upcoming research paper on the methodologies and findings of the Machine Learning study, to be presented at the Southern California Conferences for Undergraduate Research (SCCUR)

**Engineering Ambassador and Office Assistant** | Chapman University - Orange, CA March 2022 - Present

- Expand and lead engineering outreach events as part of the college's student engagement initiative
- Handle communications, supply stocking, file organization, and printing and copying tasks

**Summer Engineering Student Instructor** | Chapman University - Orange, CA June 2024 - July 2024

- Taught and introduced the concepts of Machine Learning and AI to Middle and High School students
- Prepared lesson plans and presentations for the workshop covering various topics (ML, Computer Vision)

## RELEVANT PROJECTS

**Inpatient Length of Stay and Mortality Prediction (Python, PyTorch, NumPy, TensorFlow)** July 2024 - Present

- Built a machine learning model utilizing Decomposition and Modality Fusion on Alzheimer's Data from ADNI
- Integrate multimodal data (MRI images, demographics, and time series) for enhanced predictive modeling of 5-10% through efficient low-rank representation techniques
- Achieve a reduction in computational time by extracting key features with third-order tensor mappings

**Geospatial Analysis & LLMs for Investment (LLM, GIS, Python, R, AWS, Shiny)** September 2024 - November 2024

- Perform geospatial analysis on web-scraped house data to assess the proximity of houses to public services
- Utilize a large language model (ChatGPT) to perform sentiment analysis on the home's descriptions.
- Implement and compare two machine learning models (Random Forest and XGBoost) for price prediction, utilizing geospatial and sentiment analysis features to strengthen the model's performance by 20%.
- Deploy the model using a Shiny application built in R and host it on an AWS EC2 instance
- Publish an article and present project findings on geospatial analysis fundamentals and its role in real estate as a student speaker for a senior applied business analytics course and a non-technical audience.

**Soundify, a Streaming Application (SQL, Python, JavaScript)** October 2024 - Present

- Develop a full-stack music streaming application with a MySQL backend, implementing CRUD operations, complex queries with joins and transactions, and a user-friendly front-end
- Optimize a normalized database schema with 7+ entities, enforcing data integrity and enhancing query efficiency using MySQL features such as aggregation, indexing, and subqueries
- Create dynamic data filtering and reporting functionalities, enabling users to interact with the database

## ACADEMIC AWARDS AND LEADERSHIP

- Chapman AI Club, **Internal Vice President** April 2024 - Present
- Fowler School of Engineering Student Leadership Council, **Officer** February 2024 - Present
- Quade Stahl Talent & Human-Centered Engineering Awards Recipient 2021, 2022, 2023, 2024
- North Orange County Computer Club Prize Award Recipient 2024
- Provost's List 2022, 2023, 2024
- Chapman Res. Life and First Year Exp., **Orientation Leader** May 2022 - May 2024
- Chapman Student Government Association, **Senator and Chairperson** October 2021 - April 2024