

# Gabriel Cha

## Technology & Data Analytics

gcha@ucsd.edu | (832) 993 - 4499 | [Linkedin](#) | [Website](#)

Results-driven individual with 2 internships in Data Analytics & Data Science, specializing in data wrangling, automation, and machine learning. Improved efficiency and cut data retrieval time by over 60% through Python-based automations. Adept in data mining, predictive modeling, and enhancing data science capabilities through collaborative efforts.

## EDUCATION

University of California San Diego

Class of 2025

### Bachelors of Data Science

- **GPA: 3.8 / 4.0**; Provost Honors; Recipient of Halicioglu Data Science Scholarship (\$2000) [offered to 32 students](#)
- **Coursework:** Data Struct. & Algo. (Java), Data Management, Scalable Systems, Probabilistic Reasoning & ML
- **Coding:** Python, SQL, Spark **Machine Learning:** Scikit-Learn, TensorFlow **Visualization:** Tableau, Plotly, Matplotlib

## EXPERIENCE

Edison International

Rosemead, CA

### Data Analytics Intern

June 2024 - Present

- Developed Python scripts to detect anomalies in solar energy production and automated email reports to alert respective departments, ensuring data quality and reliability for accurate payment to counterparties.
- Built Python-based automation into production which monitors the efficiency of battery storage systems by parsing structured data and retrieving requested metrics in Snowflake-populated Excel sheets, reducing data retrieval time by more than 60% and reportedly saving 40 hours annually.
- Proactively interviewed 9 procurement specialists to understand user needs, gather detailed requirements, and addressed limitations of the tool ensuring the automation met operational assumptions and expectations.

UC San Diego

La Jolla, CA

### Instructional & Teaching Assistant

March 2022 - June 2024

- Led 160+ office hours, providing guidance in data wrangling, statistical experimentation, and machine learning, spanning 800+ one-on-one interactions; highly rated by students for clear and compassionate communication.
- Troubleshooted auto-grading scripts to resolve errors in the grading process of over 10,000 assignments.
- Developed and pushed 2 programming assignments on data cleaning and bus network visualization, approved by professors and completed by 400+ students, collectively accounting for 10% of student's course grade.

Engineers for Exploration

La Jolla, CA

### Data Science AI/ML Intern

March 2023 - September 2023

- Proposed and implemented research methods, specifically data augmentation techniques like adding Gaussian noise, improving model's generalization and enhancing the model accuracy for classifying bird species by 2%.
- Developed Python scripts to remove corrupted audio recordings, cleaning 3% of the dataset and ensuring accurate representation of nocturnal bird species.

## SCHOLARSHIP & PROJECTS

**Speech Emotion Recognition** | (Python, TensorFlow) Halicioglu Data Science Scholarship (\$2000) | [Poster](#)

- Recipient of the HDSI scholarship to research emotion classification in voice recordings, transforming recordings into matrices using Fourier analysis, and optimizing 4 models (Decision Tree, SVM, ViT, CNN).

**N-Gram Language NLP** | (Python, Regex, Pandas) | [Github](#)

- Developed language model that computes the conditional probability of a given word based on its preceding word, trained and sampled from a web-scraped e-book of The Great Gatsby by using regex to create tokenized words.