Gabriel Cha

Technology & Data Analytics

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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 automation. 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. & Algorithms, Data Management, Probabilistic Reasoning & ML, Analytics at Scale
- **Programming & Tools:** Python, SQL, Java**,** Spark, JupyterLab, Sklearn, TensorFlow, AWS, Power BI, Tableau, Excel

EXPERIENCE

Edison International   Rosemead, CA
Data Analytics Intern   June 2024 - Present

- Developed and deployed to production a Python-based GUI tool to monitor active energy storage systems by auto parsing structured data and retrieving requested metrics in Snowflake-populated Excel sheets, reducing data retrieval time by more than 85% 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 internal tool met expectations and operational requirements.
- Detected anomalies in solar energy production using Python, and automated the creation of reports detailing flagged days with origin of data source, ensuring data quality and reliability, saving over 20 hours per month.

University of California San Diego   La Jolla, CA
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.