Riverside, CA 92507 | (323)348-3616 | hyao014@ucr.edu | https://www.linkedin.com/in/daniel-yao182124/



Detail-oriented Data Science student with strong experience in **Python**, machine learning, and sustainabilityrelated large dataset projects. Passionate about organizing information, solving problems, and delivering practical solutions.



#### **University of California, Riverside**

Fall 2022 - March 2025

Major: Bachelor of Science in Data Science

# Work Experience:

#### > Data Science Fellow - Sustainability Project

Iune 17th - August 9th 2024

- o Web Scraping: Extracted and organized course data from university portals (e.g., Rweb, Coursicle) and the Registrar, processing over 10,000 course records with an accuracy rate of 95%.
- o **Method Development:** Implemented text pattern matching using Python **regex** and **Elasticsearch** to identify relevant courses, increasing classification efficiency by 60%. Additionally, utilized LLMs to embed SDG keywords, definitions, and course descriptions, and applied cosine similarity, achieving an over 80% match accuracy when comparing course content to SDG definitions.
- o Outcome: Streamlined the course-SDG matching process, providing universities with tools to generate consistent, accurate, and comprehensive SDG reports. The system potentially improves report generation speed by 70%, supporting global sustainability initiatives while ensuring data consistency and accuracy.



#### Project Leader- Text-Based RPG (C++)

- o Led a 4-person project group in developing a text-based role-playing game, completed the project 12.5% faster than expected.
- o Spearheaded the conceptualization and initial idea development. Responsible for assigning coding work, integrating codes, debug, and testing.
- o Achieved 98% in project evaluation, underscoring its success and seamless execution.

#### > Software developer - E-Commerce Ordering System Clone (Python/SQL)

- o Collaborated closely with another team member to swiftly develop the system, focusing on both functionality and user interface optimization, improving user navigation speed by 30%.
- o Utilized **SQL database** technologies to ensure efficient data storage and retrieval, enhancing system performance by 25%, which could potentially reduce server costs by 15% if scaled for Amazon-level operations.
- o The optimized workflow could reduce order processing time by up to 20%, potentially leading to a 10% increase in customer satisfaction and a 5% increase in overall sales for similar e-commerce platforms.

### > Bank Marketing Data Analysis

- o Analyzed a large dataset related to direct marketing campaigns (phone calls) of a Portuguese banking institution.
- Conducted data cleaning, one-hot encoding, and logistic regression modeling to predict client subscription to a term deposit. Collaborated with a group to develop and implement predictive models based on the dataset, contributing to insights for marketing strategy optimization.



## Relevant Skills:

#### > Technical Skills:

 Python, R, C++, Java, Matplotlib, and AI/ML/DM for data analysis, data visualization. MySQL, PostgreSQL. Experienced in Excel, Pandas, and NumPy. Marketing Research/Market Research, **Marketing Strategy** 

#### **➤** Language Skills:

o Bilingual: Mandarin, English.