Wanlin Chen

(213) 245-3640 | wanlinch@usc.edu | Los Angeles, CA | https://lanie-chen.github.io/

EDUCATION

University of Southern California | GPA 3.8

Master of Science, Spatial Economics and Data Analysis

Tianjin University of Technology | GPA 3.9

Bachelor of Science, Business Administration

Los Angeles, CA May 2023 (Expected) Tianjin, China Jun 2022

EXPERIENCE

Huntington-USC Institute of California & The West | ArcGIS Pro

Los Angeles, CA Feb 2023 - Present

Research Assistant

- Compared the performance of various GIS georeferenced methods including first-order polynomial, adjust, and projective transformation, expanding the accuracy of the map alignment.
- Performed data entry, assisted with data quality issues, and resolved data discrepancies by analyzing spatial relationships and standard errors at control points.
- Developed an interactive digital map and an augmented reality experience access to historical data, serving as a valuable resource for scholars, researchers, and members of the public interested in exploring the history and cultural heritage of Los Angeles.

YueFu Technology Company | Python

Guangzhou, China

Data Analyst Intern

Apr 2021 - Jul 2021

- Drove progress in the Southern China Food and Beverage Manufacture Project by utilizing Python to extract data of over 300,000 land transactions and perform exploratory data analysis to explore economic opportunities and deliver valuable insights in the industry.
- Segmented companies into distinct business groups, recognized characteristic distinctions between emerging and traditional industries, and created thematic maps to visualize the distribution of the industry to support analytic reports.
- Collaborated with cross-functional teams to define and prioritize key performance indicators, and generated dashboards and reports to track business performance and identify areas for improvement.

University Career Services Center | SQL

Tianjin, China

Data Science Assistant

Feb 2018 - Jun 2018

- Applied E-R model and optimized queries, improving database performance by reducing prediction latency by 20% and eliminating 25% of duplicate entries.
- Extracted crucial employer data, including company locations, job descriptions, and salaries, from over 100,000 rows of data using SQL queries, creating accurate job postings that increased applicant numbers.
- Leveraged regression modeling to examine the impact of employment metrics including unemployment rate, average hourly wage, and job growth rate, on student engagement with job postings, devising effective strategies for boosting engagement levels.
- Developed and implemented a user feedback system to gather input from students and employers, resulting in a 90% satisfaction rating among users and a 40% increase in platform utilization.

PROJECTS

Spatial Data Analysis

Aug 2021 - Dec 2022

- Performed thorough exploratory data analysis, discovered patterns of spatial dependence and heterogeneity, and used spatial regression models to assess the effect of COVID-19 policy on housing prices market in New York City.
- Conducted geographic mapping analysis and k-means clustering algorithm to identify areas with disparities in insurance plan availability and utilization, informing policy decisions related to plan distribution and design and resulting in increased access to insurance coverage in underserved areas and improved health outcomes for vulnerable populations.
- Cleaned spatio-temporal raw mortality statistics data logs with a focus on fatal encounters in New York City and built causal inference algorithms to evaluate the treatment effect of the use-of-force policy.

Consumer Behavior Analysis

Feb 2019 - Jun 2019

- Conducted market analysis and compared sustainable marketing strategies of L'Oreal and Shiseido through extensive research, customer interviews, and feature request analysis.
- Utilized advanced statistical models including exponential smoothing, ARIMA, and principal component analysis to analyze consumer trends and predict future purchase rates.
- Designed and executed A/B testing to evaluate advertising strategies and optimize critical metrics for increased customer engagement and conversion rates.

SKILLS

- Software: ArcGIS Pro; Stata, MS Access, Microsoft Office Suites, Tableau
- Programming Language: SQL; Python; R
- Language: English, Chinese (Mandarin and Cantonese)