

# Carmen Yuchen Guo

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## EDUCATION

### University of California, San Diego

M.S., Computational Social Science, 4.0/4.0 GPA

Relevant Courses: Statistical Methods, Text as Data, Deep Learning

La Jolla, CA

Expected June 2026

### The University of Hong Kong

M.S., Marketing

Relevant Courses: Applied Marketing Research & Metrics, Big Data Consumer Analytics

Hong Kong SAR

Graduated July 2022

### Peking University

B.A., Advertising

Relevant Courses: Calculus, Communication Research Method, Principle of Economics

Honors: May 4th Scholarship of Peking University (2018), Academic Excellence Award (2020)

Beijing, China

Graduated July 2021

## TECHNICAL SKILLS

**Machine Learning & Modeling:** Supervised and unsupervised learning, regularization (Lasso/Ridge/Elastic Net), tree-based models, feature engineering, model evaluation

**Programming & Frameworks:** Python, SQL, R; experience with scikit-learn, Pandas, NumPy, PyTorch

**Visualization & Communication:** Matplotlib, Seaborn, Tableau

**Languages:** Mandarin (native/bilingual), English (native/bilingual), Cantonese (native/bilingual)

## PROFESSIONAL EXPERIENCE

### The University of Hong Kong

Program Manager, Admissions Data Analytics

Management Trainee

Hong Kong SAR

Dec 2024 – June 2025

Sep 2023 – Dec 2024

- Selected as one of 7 candidates from 700+ applicants for HKU elite management trainee program
- Led data wrangling and analysis (~30,000 entries) using advanced Excel formulas and pivot tables to provide longitudinal and comparative application trends and shortlist applicants
- Designed and maintained interactive dashboards with Excel and Power BI integrating multiple data sources for benchmarking, enrollment estimation and diversity metrics monitoring, informing strategic admission decisions
- Collaborated with technical teams to design and evaluate a student support chatbot on Power Virtual Agent, applying topic modeling (LDA) on query patterns to identify information needs and achieved 85%+ goal completion post-launch
- Monitored and analyzed chatbot usage logs including early conversation drop-off and bounce rates to drive continuous improvements

### Sandpiper

Account Executive

Hong Kong SAR

June 2022 – Feb 2023

- Conducted comprehensive statistical analysis using R on survey data from 8,087 respondents across 8 countries, summarizing cross-sectional data and employing T-tests and ANOVA to identify demographic and socio-economic patterns
- Produced data-driven insights for 50-page published report on digital lifestyle, including year-over-year changes comparing with last survey
- Developed market-specific data snapshots and visualizations for a consumer expectation survey, identifying country-specific data highlights, enabling tailored distribution of survey findings in different markets
- Compiled monthly Media Monitoring and Analysis Reports, summarizing key news coverages and policy updates related to COVID-19 oral antivirals across the region, sharing trends and opportunities
- Supported development of a healthcare policy white paper through synthesizing relevant literature and academic publications

## RELEVANT PROJECTS

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### UC San Diego

La Jolla, CA

*Graduate Researcher – Deep Learning for Multilevel Regression and Poststratification*

Sep 2025 – Present

- Applied generative deep learning to infer county-level climate opinions from national surveys, extending traditional MRP to handle multiple outcomes and nonlinear interactions
- Designed a three-stage estimation pipeline leveraging latent encoding and demographic poststratification for local opinion distributions

*Graduate Researcher – Textual Analysis of Party Influence through Information*

Sep 2025 – Dec 2025

*Disclosure Reports*

- Trained and validated supervised text classification models (Naive Bayes, LASSO, Decision Tree) to measure Chinese Communist Party influence in university documents using hand-labeled ideological indicator
- Assembled a Chinese-language text corpus, conducted text preprocessing, model comparison and error analysis to apply predictions at scale to thousands of document snippets

### The University of Hong Kong

Hong Kong SAR

*Research Project – Emotional Motivator Network and TikTok Marketing*

Oct 2021

- Constructed and analyzed emotional motivator co-occurrence networks in TikTok contents using Gephi, discovering patterns relating to brand characteristics
- Performed correlation and Multiple Regression analysis with R to quantify the impact of emotional motivators on viewer engagement