XINYUE 'YOLANDA' PAN

Chicago, IL 60615 | (504)541-3533 | xpan02@uchicago.edu | LinkedIn | GitHub

PROFILE

- Technical Skills: SQL (MySQL, SQLite3), Python (NumPy, Pandas, Matplotlib, Seaborn, ggplot, Regex), R, PowerBI, Tableau, Excel (VBA, VLOOKUP), Microsoft 365, STATA, SPSS, Web Mining (Scrapy, Requests), Large Scale Computing (AWS, GCP)
- **Data Analysis**: Hypothesis Testing, A/B Test, Multivariate Regression, Machine Learning (Scikit-Learn), Deep Learning (PyTorch, Keras), Network Analysis
- Soft Skills: Communication, Leadership, Stakeholder Engagement, Cross-team Collaboration, Presentation
- Languages: Chinese (proficient), Spanish (elementary)

EDUCATION

University of Chicago, Chicago, IL

MA, Computational Social Science (STEM, Concentration: Data Science), Expected in Jun. 2026 | GPA: 3.85/4.00

Coursework: Machine Learning, Data Management, Deep Learning, Social Network Analysis; Ongoing: Large Computing

Tulane University, New Orleans, LA

B.S., Psychology, B.S.M., Finance, Management, May 2024 | GPA: 3.94/4.00 | Magna Cum Laude

Coursework: Econometrics, Business Analytics, Organizational Behavior, Marketing, Accounting, Financial Modeling

PROFESSIONAL EXPERIENCE

NielsonIO, Shanghai, China | Consumer & Marketing Insights Intern, May 2024 – Aug. 2024

- Designed and executed a survey to identify engagement drivers for a mobile securities app across demographic segments
- Cleaned and validated survey data using fuzzy matching, automated consistency checks, outlier detection, and statistical imputation methods, ensuring high-quality datasets for accurate analysis and decision-making
- Conducted market research to support a global card organization's APAC expansion strategy, leveraging public policy analysis, social media listening, and competitor benchmarking to assess market size, consumer preferences, and growth opportunities
- Analyzed 15+ brand equity metrics across 3 markets, creating interactive dashboards and visualizations (e.g., heatmaps, scatter plots) using *PowerBI* and *PowerPoint* to help clients understand market trends and inform expansion strategies

IMA Financial Group, Inc, Denver, Colorado | Marketing Intelligence Intern | Jun. 2022 – Aug. 2022

- Cleaned and paired 1,000+ client claims data from multiple sources using SQL, ensuring a unified dataset for analysis
- Solved client premium prediction challenges through multivariate regression analysis to predict future premium charges, optimizing sales strategies and client retention
- Performed financial analysis on 13 carrier partners' public filings of *SEC Edgar* and official websites to assist the company in performing due diligence on profit models, operational strategies, and financial conditions
- Delivered a cross-team presentation offering insights on expanding the customer base through increased community engagement

RELATED PROJECTS

Public Opinion Shift on Health Insurance | Machine Learning Course Project | Winter 2025

- Led 4-person team to develop sentiment analysis framework and classification criteria for healthcare text data
- Applied NLP techniques (*regular expressions*, *bag-of-words*, *vectorization*) to collect and preprocess 20,000+ Reddit posts through engineering features from key healthcare terms following the UnitedHealthcare CEO incident
- Trained and optimized *Random Forest* and *Logistic Regression* models through systematic hyperparameter tuning (*GridSearchCV*, *RandomizedSearchCV*), achieving 6.4% improvement in classification accuracy
- Conducted time-series analysis and visualized sentiment trends using *Matplotlib* and *Seaborn*, revealing a 6% significant increase in negative sentiment post-event

AI-Powered Labor Market Research & Behavioral Analysis | A.B. Freeman Business School | May 2023 – May 2024

- Designed and executed experimental research on human-AI collaboration, using validated psychological scales and multi-rater systems to analyze AI's effectiveness in workplace conflict resolution
- Collaborated with a team of researchers to develop a search-and-matching model, analyzing AI's role in reducing information gaps between employers and job seekers, and demonstrating 15% improvement in platform efficiency through simulations

Corporate DEI Statement Analysis | Social Relations and Wellness Lab | Mar. 2022 - May 2023

- Built and managed database of Fortune 100 companies' DEI statements for systematic analysis of social justice responses
- Conducted thematic coding analysis of 69 corporate statements, demonstrating 85% inter-rater reliability
- Performed data validation and SPSS statistical analysis for 280+ participant responses using multiple quality protocols
- Applied LIWC 2015 to analyze linguistic patterns, uncovering companies' communication approaches during social movements

ADDITIONAL ACTIVITIES

Oliver Wyman Case Competition, May 2024 | Top 20 among thousands; developed data-driven strategies for the beauty industry CPSI Equity Research Project, Spring 2023 | Published and presented equity research report at the 26th Annual Burkenroad Reports Investment Conference