Yishu (Eva) Cao

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EDUCATION

Carleton College   Northfield, MN
Bachelor of Arts   Sep 2021 – Jun 2025
Majors: Statistics, Computer Science | GPA: 3.67/4.00
- **Statistics Coursework:** Probability, Regression Analysis, Statistical Inference, Spatial Statistics, Intro to Data Science
- **CS Coursework:** Data Structure, Intro to Computer System, Algorithm, Programming Language, Data Visualization

PROFESSIONAL EXPERIENCE

DKT International   Washington, DC, US
Knowledge Management and Data Analytics Intern   Dec 2024 – Present
- Extracted and cleaned 10k historical sales records, analyzed fundraising trends, and developed interactive Power BI dashboards with dynamic visualizations, presenting key performance metrics to senior leadership
- Contributed to knowledge management by organizing internal data sets, establishing database links, and proposing innovative methods to communicate DKT's impact, offering actionable recommendations to improve organizational strategies
- Assisted with multi-country grant management by tracking and analyzing donor behavior, and enhancing database functionality

Century Securities Co., Ltd   Shenzhen, CN
Fixed Income & Risk Management Intern   Aug 2024 – Oct 2024
- Extracted and cleaned 1M historical stock price data from internal trading systems and third-party vendors using Excel and Python, ensuring data accuracy and streamlining downstream processes for model development and analysis
- Developed stock price forecasting models using Monte Carlo simulations for long-term price range estimation, delivering actionable insights that optimized investment strategies and enhanced decision-making
- Implemented a Python-based Value at Risk (VaR) model to assess equity portfolios, performing individual stock and portfolio-wide VaR calculations to ensure compliance with company risk limits and enhance market risk management
- Conducted stress testing in Excel to evaluate market, credit, and liquidity risks under a severe market crash scenario, assessing the company's risk-bearing capacity and aiding in the development of strategic risk mitigation measures
- Performed due diligence for primary market issuance by organizing documentation and analyzing guarantor equity structures, operations, and financial statements for 5 clients, supporting informed investment decisions and securing regulatory approvals

Western Securities Co., Ltd   Xi'an, CN
Market Data Analyst Intern   July 2024 – Aug 2024
- Analyzed over 500k A-share market data and utilized linear regression and random forest models to forecast market trends and sector performance, delivering insights on investment opportunities and risk alerts in semiconductors and real estate industries
- Leveraged Power BI to create dashboards for conducting in-depth market analysis, designing tailored dashboards that effectively communicated market trends and investment opportunities for 4 clients based on their specific interests
- Gained proficiency in financial data systems and tools to enhance client communication and service management

PROJECTS

Wildfire Vulnerability Analysis in California | Carleton College   Mar 2024 – Jun 2024
- Collected raw data on wildfire incidents, demographic factors, and CAL FIRE facilities from multiple sources, resolving spatial data inconsistencies and addressing missing values using R
- Developed Spatial Lag models (SLM) and Inhomogeneous Poisson Process (IPP) models to analyze the impact of environmental and demographic factors on wildfire vulnerability, applied AIC to determine the best-fitting model for predicting wildfire risk
- Conducted areal analysis and point-process analysis to identify wildfire clustering and assess the spatial distribution of CAL FIRE facilities, visualized the correlation between wildfire incidents and demographic factors

Gentrification and Demographic Analysis of Baltimore | Carleton College   Mar 2024 – Jun 2024
- Collected demographic and gentrification data from the BuzzFeed News project "Gentrification and Demographic Analysis — 2000 to 2017" and integrated tract-level data with geographic shapefiles, ensuring accurate alignment and consistency for spatial analysis
- Created interactive visualizations using JavaScript in Observable Notebook to analyze trends of suburban minority growth and central area gentrification, and evaluated potential biases caused by map design in visual representation

Impact of Real-World Events on Wikipedia Activity | Carleton College   Mar 2024 – Jun 2024
- Extracted data using query language with Wikipedia REST and MediaWiki APIs, selected and applied parameters for comprehensive data retrieval, including timestamps, user info, and revision content focusing on articles related to abortion law
- Identified significant spikes in user activity, reflecting public reaction to the Supreme Court's decision on abortion rights, and evaluated potential biases in visual representation and the impact on viewer interpretation

SKILLS

Technical Skills: Python, R, SQL, JavaScript, Java, C, Excel
Languages: Mandarin (Native), English (Native-like)