

# Jessica Wang

+1-2066615875 | diyaw24@uchicago.edu | linkedin.com/in/diya-jessica-wang

## EDUCATION

### University of Chicago

*Master of Science in Applied Data Science*

**Chicago, IL**

*Expected 12/2025*

### University of Washington

*Bachelor of Science in Economics & Bachelor of Arts in Mathematics, Minor in Business*

**Seattle, WA**

*09/2020 - 06/2024*

- **Relevant Coursework:** Calculus with Analytic Geometry, Advanced Multi variable Calculus, Elements of Statistical Methods, Data Programming, Marketing, Management and Entrepreneurship, Business Finance and Information Systems

## SKILLS

- **Programming & Tools:** Python(NumPy, Pandas), SQL, R, Git, Jupyter Notebook, Tableau
- **Data Analysis & Machine Learning:** Data Cleaning, Feature Engineering, Regression, Clustering, ARIMA, LSTM, Model Evaluation, Bayesian Inference, Monte Carlo Simulation
- **Big Data & Cloud Computing:** Spark, Hive, AWS (S3, Lambda), Google BigQuery

## PROFESSIONAL & LEADERSHIP EXPERIENCE

### Lions Financial

*Risk Management Analyst Intern*

**New York, NY**

*06/2024 - 08/2024*

- Analyzed data using SQL to extract and transform information from automotive industry reports and financial statements, identified potential trends, documented crucial requirements with stakeholders, and applied financial modeling to predict performance, delivering actionable insights for strategic planning
- Implemented robust risk management strategies through comprehensive data analysis to mitigate potential risks by 29% and provided detailed analytical reports and actionable insights to company executives, aiding in investment decisions

### China Entrepreneur Network (CENW)

*Vice President*

**Seattle, WA**

*09/2022 - 06/2024*

- Led a team of 80 students in organizing data-driven career development seminars focused on industry insights and networking strategies, resulting in 57 students securing internships and expanding their professional networks
- Initiated the CEN Business Challenge, leading efforts in strategic goal-setting, performance metrics development, committee operations, and collaborations with diverse stakeholder groups, driving a 36% increase in participation rates

## PROJECT EXPERIENCE

### CICC | Project Intern, Investment Banking Division

*06/2022 - 08/2022*

- Executed thorough due diligence on a food company, integrating data from both external and internal sources to evaluate key industry metrics, including equity structure, and utilized SQL and Excel to perform in-depth analysis of the company's competitive advantages, delivering critical support for strategic decision-making processes
- Provided strategic counsel to senior leadership on optimizing R&D for high-potential products to enhance productivity, and recommended prioritizing innovation over expanding market share, aligning with long-term objectives to strengthen its position for a successful IPO process, emphasizing sustainable growth through core product improvements

### Investment Simulation Project

*06/2023 - 08/2023*

- Utilized SQL and advanced data analysis to compare fair value and cost measurement models in the real estate and biomedical sectors, leveraging user-generated data and market research to support strategic decisions and align with business analytics goals
- Performed detailed valuation analysis and financial forecasting for a semiconductor company, applying key financial metrics (P/E, P/B, P/S, EV/EBITDA, DCF), delivering essential insights for data-driven investment decisions, encompassing stock transactions, and initiating new projects

### Fraud detection in the 2009 Iranian Presidential Election Dataset

*09/2022 - 12/2022*

- Enhanced data integrity by meticulously cleaning a dataset comprising 5 million voting records and over 20 variables, including voting location, gender, and ID number, using Matplotlib in Python to identify and prioritize five key attributes, significantly improving the dataset's usability for advanced statistical analysis
- Formulated a null hypothesis regarding potential election fraud and employed statistical analysis to assess variations across different samples, and applied simulation methods to estimate statistical confidence, concluding that the null hypothesis could not be rejected due to insufficient evidence of fraud, thus validating the integrity of the election result

### Financial Risk Investment Portfolio and Pricing Theory Based on Quantitative Analysis

*07/2022 - 09/2022*

- Aggregated and transformed 20 years of historical daily data for 11 stocks from Yahoo! Finance into monthly metrics, and effectively visualized correlations using Tableau and data analytics techniques to inform risk management strategies
- Implemented Markowitz Model and Index Model to optimize investment portfolios, revealing that the Index Model's superior performance of the Index Model while highlighting the risks associated with its limited sample size and non-universal applicability, thus providing crucial insights for investment decision-making