

MADELINE LIN

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PROFESSIONAL EXPERIENCE

Deloitte - Senior Consultant, Transactions Pricing & Econometric Research; New York **Jun 2021 - Present**

- Worked with global team to deliver the pricing and valuation services of intercompany financial transactions (e.g., loans, FX trades, cash pooling, asset pricing, factoring, IP valuation) to multinational corporations with AUM ranging from \$17B to \$51B within private equity, mutual funds, hedge funds, proprietary trading firms and other asset management industries
- Conducted in-depth quantitative analysis to determine fair market value, performed 120+ comprehensive interest rate, debt capacity and cash flow analyses for REIT intercompany loans, leveraged proprietary financial models to benchmark LBOs and CLOs, provided the appropriate pricing strategies, and drafted the investment memorandums and reports
- Reviewed 150+ financial statements, 10K filings and intercompany agreements, analyzed competitive industry dynamics and financial condition of peer companies, evaluated business strategic plans, and built financial models such as DCF and CAPM analyses
- Spearheaded the integration of data technology software and Deloitte internal GenAI tool for various intercompany financial transaction pricing use cases, improved the operating margin of a project from ~48% to ~91%
- Applied statistical modeling techniques to evaluate the financial impact of ESG activities on intercompany transactions, achieving a significant 15% improvement in financial efficiency and enhancing risk management strategies for the clients
- Conducted research on the impact of tariff on multinational firms, developed an advanced econometric approach to analyze how macroeconomics variables influence company profit level indicators, and provided strategic insights on benchmarking studies

Deloitte Generative AI and Data Science Projects - Firm Contributions; New York NY **Jun 2023 - Aug 2024**

- Worked with AI & Data Team in Deloitte Consulting to support the pharma firm to shape its GenAI roadmap, focusing on innovative solutions to boost operational efficiencies and ensuring compliance with regulatory, cybersecurity, and data privacy standards
- Collaborated with software engineers on NLP ontology driven matching algorithms, designed the user interface for the healthcare data mapping process, transformed the UI designs into functional and interactive elements, and incorporated LLMs into the system
- Developed the dashboards for the life science industry, visualized the performance metrics and key insights from collected survey data

PROJECT & INTERNSHIP

Machine Learning Analysis on Spotify Recommendation System - Personal Endeavor; New York NY **Feb - Apr 2023**

- Built an advanced stream prediction regression model utilizing track audio features such as danceability, energy, liveness, key, employed rigorous regression techniques through stepwise selection, and decision tree methodologies
- Conducted a comparative analysis of machine learning algorithms, specifically Support Vector Regression and Feedforward Neural Network, to optimize Spotify's recommendation system for enhanced quantitative performance

CertiK - Economic Research Intern; New York NY **Dec 2019 - Jan 2020**

- Supported the blockchain security industry in economic analysis of Ethereum 2.0 and Cosmos Network, using statistical techniques to develop a validator incentive model, analyzed the economic design, and evaluate the profitability of Proof of Stake algorithm

Austin Film Festival - Data Analytics Intern; Austin TX **May - Jun 2020**

- Created data visualizations for film submissions, utilized clustering and PCA methods to identify key customer segments, summarized customer purchasing patterns and preferences, and optimized marketing strategies

EDUCATION

Baruch College; Pre Master of Financial Engineering Program; Virtual **Jun 2024 - Current**

- *Courses:* Probability Theory for Financial Applications (Distinction), Practical Python with Applications in Finance (Distinction), Advanced SQL in Finance (Distinction), Machine Learning with Financial Application (Distinction), VBA for Financial Engineering (ongoing), C++ Programming for Financial Engineering (ongoing)

Monroe College; Data Science Certificate Program; New Rochelle NY **Apr 2022 - Apr 2023**

- GPA: 4.0/4.0 *Courses:* Statistical Computing, Object Oriented Software, Database System, Big Data Management and Analytics, Machine Learning, Data Science, Analytic Techniques, Applied Data Science Project

University of Texas at Austin; Master of Quantitative Economics; Austin TX **Jul 2018 - May 2020**

- GPA: 3.51/4.0 *Courses:* Econometrics, Mathematics for Economists, Probability and Statistics, Statistical Learning, Computer Programming Python, Business Analytics & Decision Making

Shanghai Maritime University; Bachelor of International Accounting; Shanghai CN **Sep 2014 - Jul 2018**

- GPA: 3.76/4.0 *Courses:* Calculus I and II, Linear Algebra, VB Programming, Probability and Mathematical Statistics, International Finance, Monetary and Banking, Financial Management

OTHERS

Certificates and Firm Contributions: AWS Machine Learning - Specialty, AWS Cloud Practitioner, Deloitte GenAI Prompt Engineer, Deloitte Tableau Specialist, Deloitte Basketball Club Co-Leader

Hobbies: Part-time Fitness Model, House and Soul Music, Basketball, Reading, Mentoring