

## MADLINE LIN

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### PROFESSIONAL EXPERIENCE

**Deloitte - Senior Consultant, Transfer Pricing;** New York NY

**Jun 2021 - Present**

- Worked with global team to deliver cross border financial transactions consultancy services to multinational corporations with AUM ranging from \$17B to \$51B within PE, mutual funds, hedge funds, and other asset management industries, facilitated optimized financial decision-making through in-depth quantitative analysis of their intercompany financial transactions, such as intercompany loan, foreign exchange trades, cross-border financing, asset pricing, business valuation, etc.
- Performed 80+ comprehensive interest rate analysis, debt capacity analysis, and cash flow analysis for land banking blocker and borrower intercompany loans under a REIT structure, leveraged financial models to benchmark LBOs and CLOs against target IRR, prepared relevant memorandums and documentation
- Conducted industry research to analyze the market trends, key challenges and opportunities for 50+ clients, performed functions, risk, asset analyses, and applied accounting, capital adjustments to evaluate key financial operating metrics or interest rates ratios, including considerations such as tenor, time, subordination, and credit rating
- Carried out intellectual property valuations, identified key components, estimated their economic useful life, benchmarked the WACC, applied the DCF model to propose potential intercompany business licensing transaction, leading to ~10% in tax savings
- Reviewed 100+ financial statements, 10K filings and intercompany agreements, assisting audit teams in financial services industry with tax provision audits

### PROJECTS & LEADERSHIP

**Practical Python with Applications in Finance - Personal Endeavor;** New York NY

**Jun 2024**

- Developed and implemented a comprehensive asset backed security model, incorporated cashflow calculations via a waterfall mechanism, financial metrics analyses (i.e. IRR, DIRR, AL), and risk assessment through Monte Carlo simulations
- Conducted scenario analysis and stress testing on the ABS model to evaluate the impact of various economic conditions on cash flow stability and credit performance, ensuring robust risk management and strategic planning

**Deloitte Generative AI Firm Contribution Projects - Firm Contribution;** New York NY

**May 2023 - Aug 2024**

- Supported the pharma firm shape its GenAI roadmap, focusing on innovative solutions to boost operational efficiencies across multiple domains, managed the technical architecture, and ensured compliance with regulatory, cybersecurity, and data privacy
- Supported the investment management firm to identify critical data element based on the input documents, implemented the data platform modernization, utilized GenAI framework and accelerators to generate the business glossary definition and data quality rules
- Collaborated with software engineers on NLP ontology driven matching algorithms for healthcare analytics platform, designed UI for healthcare data mapping process, and integrated LLMs across all layers of the application

**Machine Learning Analysis on Spotify Recommendation System – Individual Project;** New York NY

**Feb 2023 – 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 comprehensive analysis of machine learning algorithms, specifically support vector regression and feedforward neural network, to optimize Spotify's recommendation system for enhanced quantitative performance

### EDUCATION

**Monroe College; Master of Data Science;** New Rochelle NY

**Apr 2022 – Apr 2023**

- GPA: 4.0/4.0 *Relevant Courses:* Machine Learning, Statistical Computing, Object Oriented Software, Database Systems, Data Science, Big Data Management and Analytics, 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 *Relevant Courses:* Econometrics, Data Mining, Probability and Statistics, Causal Inference, Computer Programming Python, Business Analytics & Decision Making, Financial Statement Analysis

**Shanghai Maritime University; Bachelor of International Accounting;** Shanghai China

**Sep 2014 - Jul 2018**

- GPA: 3.82/4.0 GRE: 169(Quant) *Relevant Courses:* Microsoft Access, Statistics, Linear Algebra, International Finance, Financial Management, Monetary and Banking

### TECHNICAL PROFICIENCIES

**Skills:** Python, R, SQL, Tableau, PowerBI, Microsoft Suites

**Databases:** Bloomberg, S&P Capital IQ, Pitchbook, Morningstar, Moody's, Eikon, Leveraged Commentary & Data, Finsight

**Certificates:** AWS Machine Learning - Specialty, AWS Cloud Practitioner, Baruch College Pre-MFE Courses Practical Python with Applications in Finance (Distinction), Probability Theory for Financial Engineering (Distinction), Advanced SQL in Finance (Distinction), Currently studying for VBA for Financial Engineering and CFA I (Feb 2025)

**Hobbies:** Weight lifting, House and Soul Music, Swimming, Part-time Modeling, Biking around the city