

# MADELINE LIN

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## EDUCATION

**Monroe College;** New Rochelle NY **April 2022 - April 2023**

*Post Masters Certificate Data Science* GPA: 4.0/4.0

- Core 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;** Austin TX **Jul 2018 - May 2020**

*Master of Quantitative Economics* GPA: 3.51/4.0

- Core Courses: Econometrics, Microeconomics, Macroeconomics, Statistics, Data Mining, Econometrics with R, Causal Inference, Computer Programming: Python, Business Analytics & Decision Modeling

**Shanghai Maritime University;** Shanghai China **Sep 2014 - Jul 2018**

*Bachelor of International Accounting* GPA: 3.76/4.0

- Core Courses: Financial Accounting, Financial Management, Calculus, Statistics, VB Programming, Linear Algebra, Marketing Analytics, Public Finance, International Finance, Monetary and Banking

## EXPERIENCE

**Deloitte - Transfer Pricing Consultant;** New York NY **June 2021 - Present**

- Work with Ph.D. economists and tax specialists to analyze and resolve international transfer pricing issues faced by multinational enterprises in a wide variety of industries
- Developed econometric models to assess ESG activities on company's profitability, performed benchmark studies on financial metrics, researched and identified macro industry trends for informed decision-making
- Conducted fact-finding discussions to understand business operations and transaction flows, performed value chain alignment analysis to identify key business drivers, designed an efficient business license model, leading to substantial tax savings

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

- Supported blockchain security industry in economic analysis of Ethereum 2.0, using statistical techniques to build a validator economic incentive model and evaluate the feasibility and profitability of Proof of Stake algorithm

**Austin Film Festival – Data Analytics Intern;** Austin TX **May - June 2019**

- Conducted sales forecast analysis for film badges, created data visualizations for film submissions, and produced a 3-page report with insights for marketing campaigns
- Identified key customer segments, examined the purchasing patterns and preferences, and optimized marketing strategies

## PROJECTS

**Healthcare Analytics Platform - Artificial Intelligence - Deloitte Firm Initiative Project;** New York NY **May 2023 – June 2023**

- Collaborated with software engineers on natural language processing ontology driven matching algorithms
- Designed the user interface for the healthcare data mapping process, transformed the UI designs into functional and interactive elements, and contributed to front end development of the application

**Life Science Accounts Scan - Deloitte Firm Initiative Project;** New York NY **May 2023 - Present**

- Contributed to the development of executive-level dashboards for the life science industry, utilized Tableau to visualize performance metrics and key insights from collected survey data, and monitor and evaluate dashboard effectiveness

**Spotify Personal Music and Recommendation System Analysis - Individual Project;** New York NY **April 2023**

- Created data visualizations to understand personal music tastes and listening habits
- Built the optimal stream prediction model based on track audio features (i.e. danceability, energy, liveness, key, etc.) through regression models, stepwise selection, and decision tree methods, and proposed a better recommendation system
- Conducted a comparative research study of Support Vector Regression and Feedforward Neural Network on Spotify recommendation system

**The Natural Gas Demand Model - Individual Project;** Austin TX **May 2020**

- Collected and organized demand, price, temperature, policy, GDP, etc. to multivariate time series data frame
- Built vector auto regression model, smoothed average method, log-linear regression model to predict natural gas demand for the next 10 years and offer potential solutions to policy makers

## SKILLS

**Computer Skills:** R, Python, SQL, SAS, Tableau, PowerBI, Stata, Hadoop, AWS Cloud Practitioner (learning), AWS Machine Learning (learning)

**Hobbies:** Lift weights, Taste cheese, Binge on music, Bike around the city, Watch classic films