YISHAN "LAMBERT" LI

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EDUCATION

North Carolina State University, Raleigh, NC
Master of Financial Mathematics — *December 2026*

Wake Forest University, Winston Salem, NC
Master of Science in Business Analytics — *May 2025*
GPA: 3.93/4.0, graduated with distinction
Bachelor of Science in Mathematical Economics (Minor: Psychology) — *May 2024*
GPA: 3.64

Relevant Coursework: Applications of Machine Learning, Supply Chain Analytics, Dynamic Programming, Probability Theory, Ordinary Differential Equations

CERTIFICATIONS

Corporate Finance Institute | FMVA, FPWMP Certified Designation — *October 2024*
Google Analytics Certification | Google Skillshop — *March 2025*
Quant Finance Institute | Quant Finance Bootcamp, in-progress
QuantNet | C++ Programming for Financial Engineering, in-progress
GARP | FRM Level 1 Candidate, in-progress

TECHNICAL SKILLS

Programming: Python, SQL, Java, C++, Linux
Technologies: Microsoft Office Suite: Excel, Word, PowerPoint, Outlook, Tableau, PowerBI, CRSP, Wharton Research Data Service (WRSD), Refinitiv, Wind (China)
Packages: yfinance, Pandas, scipy, sklearn.model, sklearn.ensemble, sklearn.metrics, imblearn, sklearn.decomposition, xgboost, plotly, matplotlib, seaborn, statsmodels

PROFESSIONAL EXPERIENCE

Quantitative Analytics Intern, **SDIC Securities Co.,** Shenzhen, China — *May 2025 – Present*
- Pre-processed and analyzed large-scale financial datasets, performing validation, and dimensionality reduction to support model estimation and event studies.
- Developed and implemented the **Vasicek and Cox-Ingersoll-Ross (CIR) stochastic interest rate models**, capturing mean-reverting behavior in interest rate dynamics to reflect realistic economic conditions.
- Performed market calibration using **Maximum Likelihood Estimation (MLE)** to estimate key parameters such as the speed of mean reversion, long-term mean, and volatility, ensuring model alignment with observed interest rate movements

Graduate Research Assistant, **Wake Forest University School of Business,** Winston-Salem, NC — *August 2024 – Present*
- Developed a Python-based simulation framework to model a tax-efficient ETF portfolio replicating a market benchmark over a 16-year horizon
- Engineered annual portfolio rebalancing logic and **sequential least square variance minimization** for tracking error using historical data from 2007–2023, yielding an annualized tracking error of 0.01% and a simulated annual return of 11%
- Automated data ingestion from Excel and constructed backtesting loops to simulate investment performance year-over-year, adjusting for IRS wash sale rule compliance in rebalancing decisions, and using **Choleskey decomposition for distribution and covariance extraction** to conduct Monte Carlo simulations
- Implemented optimization routines using **scipy.optimize** to allocate weights across large-, mid-, and small-cap ETFs for tax loss harvesting purposes

Consulting Intern, **McKinsey & Co.,** Shanghai, China — *December 2022 – January 2023*
- Conducted in-depth research on the business opportunities within the metaverse, focusing on retail, fashion, and luxury industries
- Applied **web3.0 technologies** to overhaul manufacturing clients' business models, resulting in strategic transformations and enhanced competitiveness
- Diversified revenue streams for client companies and modernized customer payment frameworks, optimizing financial operations

COMPETITION & PROJECT EXPERIENCE

Comprehensive Risk Modeling, **Quantitative Finance Institute** — *June 2025*
- Developed and implemented **Value at Risk (VaR) models** using **Historical Simulation, Variance Covariance, and Monte Carlo Simulation methods**, leveraging Excel for quantitative computations; analyzed portfolio risk exposure and tested the VaR model in different market conditions
- Conducted rigorous backtesting of VaR models using **Traffic Light and Kupiec Tests** to assess the accuracy and reliability of risk predictions; designed statistical validation techniques to ensure model robustness and compliance with regulatory frameworks such as Basel III
- Implemented **Expected Shortfall (Conditional VaR)** as an advanced risk measure, comparing its effectiveness against traditional VaR models. Conducted analysis to evaluate risk under tail events, improving risk management strategies and decision-making processes.

Graduate Consultant, **Mastercard** — *October 2024 – May 2025*
- Developed insights into **risk measurement frameworks** for Generative AI products, supplementing existing measures with quantitative metrics such as **Long Perplexity, Perplexity Drift, Hallucination, Brier Score**, and identified use cases as well as demonstration for metrics calculation
- Reviewed internal AI assessment guidelines and drafted an executive-level AI valuation proposal incorporating historical price trends, government reports, return on investment analysis, and industry benchmarks to evaluate the competitive landscape of generative and probabilistic models
- Conducted literature reviews and **foundational reseafsrch** to inform data-driven recommendations for navigating the evolving Generative AI market. Presented findings to the President of AI Governance, shaping strategic discussions on AI oversight

3rd Place, **Arch Mortgage Insurance**, Data Dive Competition — *October 2024*
- Developed strategic recommendations for a regional nonprofit addressing funding and volunteer shortages under time pressure
- Conducted thorough data cleaning, diagnosis, and visualization of donation and service delivery records using pandas and scikit-learn
- Applied **time-series analysis and ARIMA modeling** to isolate trends in donation patterns and used **k-means clustering** to segment donors, enabling data-driven, targeted marketing initiatives

1st Place, **KPMG Financial Services,** Case Competition — *March 2024*
- Presented a strategic solution for a mid-sized bank focusing on customer retention and tech-driven growth
- Conducted comprehensive market analysis using **Porter's Five and PESTLE** to pinpoint immediate and long-term commercial banking challenges
- Delivered two 20-minute pitches showcasing detailed financial projections to senior analysts, including **a 233% benchmark IRR**, supported by monthly cash flow analysis to demonstrate project feasibility and profitability

LEADERSHIP AND COMMUNITY INVOLVEMENT

Wake Forest University Old Gold and Black Student Press, News, *Environment Reporter* (2023 - 2024), Best of SNO award (2023) — *October 2023*
Wake Forest University School of Business, *Student Engagement Committee* — *August 2024*
Wake Forest University Badminton Club, *Member* — *August 2022 – May 2025*