
EDUCATION**Certificates in Progress**

EDHEC Investment Management with Python and Machine Learning, FINRA Securities Industry Essentials, AZ-900 Azure Fundamentals

Relevant University Coursework

Python, NLTK (Python), Database Management in SQL, C/C++/Java/Cobalt, RStudio, Calculus (I, II, III), Linear Algebra, Probability, Financial Mathematics (Options Pricing), Quantitative Finance and Deep Learning (in Python), Valuation and Modeling, Econometrics, Time Series Analysis, Applied Categorical Data Analysis, Linear Programming, Data Science, Cloud Computing, Big Data Management

University of Iowa – GPA: 3.7/4.0**08/2022 – 05/2024**

Master of Finance, emphasis Quantitative Finance (STEM degree)

Master of Science Business Analytics (STEM degree)

- Thesis in Equity Portfolio Construction: Back-tested optimization models from MPT in R to produce interactive results in Tableau
- Capstone: Forecasted sigma using ARIMA, GARCH in Python to price puts, calls, and exotics with Black-Scholes vs. Binomial vs. GBM
- Extracurriculars: 2023 CME Group University Trading Challenge, 2022 Bloomberg Global Trading Challenge
- Teaching Assistant: led 3 sections of Microeconomics, graded assignments, held office hours, visualized test results in Power BI

Iowa State University – GPA: 3.5/4.0**08/2013 – 05/2019**

Bachelor of Science Economics, minor Statistics

Bachelor of Science History, minor Political Science

- Extracurriculars: Study Abroad Czech Republic, 7+ research conference presentations, Student Investment Group \$70,000 AUM
- Research Assistant: compiled USDA Census of Agriculture data in Excel and analyzed in Stata resulting in a published journal article—Lacy, Katherine, Peter F. Orazem, and Skyler Schneekloth. 2022. “Measuring the American Farm Size Distribution.” American Journal of Agricultural Economics. <https://doi.org/10.1111/ajae.12318>

EXPERIENCE**Deloitte, Risk and Financial Advisory Intern, Des Moines IA****06/2023 – 08/2023**

- Conducted user acceptance testing to validate Discounted Cash Flow models and develop client-facing software (ValueD) by 10%
- Liaised with PPA team and computer scientists to catalog ValueD use cases in Azure text editor, accelerated discovery stage by 75%
- Supervised inaugural ValueD lunch and learn in Chicago to demo goodwill impairment tests, increased adoption of ValueD by 1%
- Finished 7-unit prompt engineering course to convert unstructured financial data into structured formats in ChatGPT-3

Security Benefit, Investment Operations Associate, Des Moines IA**06/2022 – 08/2022**

- Translated fee schedules from Investment Management Agreements into spreadsheet logic in Excel, streamlined invoicing by 10%
- Cross-referenced databases in Microsoft SQL Server to net CLO portfolio returns against carry fees on syndicated bank loans
- Completed 5-course intern training program on self-directed basis to form working knowledge of capital efficiency and SPVs

Principal Financial Group, Senior Portfolio Specialist, Des Moines IA**07/2020 – 09/2021**

- Created automated reports and interactive data visualizations in Power BI to assemble key metrics sparing 8hrs/month in manual labor
- Collaborated with information technology team to establish Amazon Web Services, improved data consistency across systems by 5%
- Assessed impact of new NAIC capital requirements on risk-adjusted return for \$80 billion multi-asset portfolio
- Influenced strategic and tactical asset allocation by managing quarterly performance attribution analysis in Excel and Power BI
- Interfaced with portfolio managers and analysts to communicate investment need across asset classes, credit quality, and yield curve

Principal Financial Group, Economic Analyst, Des Moines IA**06/2019 – 06/2020**

- Performed back tests and machine learning in R to enhance S&P 500 forecasting model by 12% and U.S. recession model by 3%
- Critiqued interest rate assumptions (LIBOR, T-Bond, spreads) monthly for IG corporate credit team to recalibrate bond valuations
- Predicted 04/2020 spot price WTI crude oil on 01/2020 in R within \$7 per barrel for Chief Economist to advocate portfolio rebalance
- Measured price reactions to FOMC signals in R for Chief Investment Strategist to reference in Bloomberg News and CNBC interviews
- Integrated data into econometric models and analysis: Bloomberg, Barclays, Markit, U.S. BEA, U.S. BLS, NBER, FRED, ECB, BOE, OECD

Principal Financial Group, Investment Operations Intern Fixed Income Co-op, Des Moines IA**01/2016 – 08/2016**

- Aided trade desk by executing buy/sell orders in Charles River Trading System with high attention to detail and sense of urgency
- Onboarded replacement intern over 3-month training period, clarified and delegated tasks without micromanaging
- Organized social events, cultivated relationships, volunteered mentorship to 50+ as board member Intern Development Committee

TECHNICAL SKILLS

AWS, Azure, Bloomberg Terminal, C++, Charles River IMS, ChatGPT-3, Cobalt, Excel, FactSet, Java, LaTeX, Linux, Macrobond, MATLAB, Microsoft Office, Oracle, Orange, Power BI, Python, R, RStudio, SAS JMP Pro, SQL, Stata, Tableau, ValueD, VSCode, @RISK Excel Add-in