Anna Effenberger

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Last updated July 29, 2023

EDUCATION

Cornell University, College of Arts and Sciences, Ithaca NY

August 2019 - May 2022

Bachelor of Arts, with Distinction in All Subjects

Summa Cum Laude in Statistical Sciences; Economics; Minor in Computer Science

GPA: 4.17/4.00. Dean's List

Coursework: Machine Learning, Artificial Intelligence, Functional Programming, Object Oriented Programing, Linear Algebra, Stochastic Processes, Theory of Statistics, Probability Models and Inference, Econometrics, Game Theory

Skills: Python, R, OCaml, Java

PROFESSIONAL EXPERIENCE

Goldman Sachs

New York City, NY

Quantitative Strategist (Prime Portfolio Strats)

July 2022 – present

- Created and enhanced risk models and margin frameworks within Prime Brokerage to expand product offerings and increase wallet share in financing for both standard products and bespoke solutions
- Developed machine learning models to predict which clients are likely to become high-risk in the near future, enabling a more proactive risk management process

Quantitative Strategies Summer Analyst (Prime Portfolio Strats, Fice GCEM Strats)

June 2021 – August 2021

- Analyzed past SPAC (Special Purpose Acquisition Company) performance to more accurately capture clients' investment risk, identify when the greatest risk occurs, and inform how to best protect against these risks
- Developed a new margining methodology for SPAC products (unit, stock, warrant, option), which calculates risk charge attributions to offer a more competitive price without substantially increasing risk exposure
- Set up a new interest rate futures contract in the firmwide trading system by implementing the price calculation, interest rate curve calibration, risk calculation across different tenors, and trade booking integration
- Created a proof-of-concept for the use of alternative data sources to train a price quoting neural network model

RESEARCH EXPERIENCE

Cornell Tech, Language, Interaction, and Learning (LIL) Lab Research Intern (NSF REU)

(remote) New York City, NY June 2020 – May 2021

- Conducted NLP (Natural Language Processing) research with Python and R under Professor Yoav Artzi
- Analyzed a large corpus of language interaction and task performance data from the CerealBar dataset to investigate individual and communal linguistic dynamics over time in a collaborative environment
- Built machine learning models with PyTorch to simulate pragmatic language dynamics in a collaborative task

Cornell Department of Statistical Sciences

Ithaca, NY

Lead Researcher

January 2020 – present

- Investigated language used in the systematic removal of under-represented demographic groups during juror questioning and selection (voir dire), under the guidance of Professors John Blume and Martin T. Wells
- Developed a novel framework in Python and R to analyze juror questioning in death penalty cases and demonstrated a proof-of-concept to provide statistical evidence for future courtroom appeals
- Presented technical statistical and computational NLP analysis to a broad audience in the Cornell Law school

PUBLICATIONS

Quantifying Disparate Questioning of Black and White Jurors in Capital Jury Selection. Anna Effenberger, John H. Blume, Martin T. Wells. *Journal of Empirical Legal Studies 2023*. doi: 12357

Analysis of Language Change in Collaborative Instruction Following. Anna Effenberger, Eva Yan, Rhia Singh, Alane Suhr, Yoav Artzi. Findings of EMNLP 2021 Short Paper. doi: 2109.04452

CAMPUS EXPERIENCE

The Cornell Hedge Fund (CHF) Ithaca, NY May 2021 - May 2022 Chief Investment Officer Managed CHF's investment process and \$13,000 portfolio and executed trades based on funds' analyses Established investment criteria, led investment committee discussions, and provided feedback on pitches Increased portfolio transparency with biweekly newsletters and greater communication with fund managers New Member Educator January 2022 – May 2022 Created and delivered an education series to teach 8 new club members finance industry fundamentals in 9 weeks, including presentation skills, valuation methods, and comparable company analysis Analyst January 2020 - May 2021 Conducted financial modeling and company and industry research as an analyst in the Telecommunications, Media & Technology (TMT) and Industrial verticals to successfully pitch a new stock towards CHF's portfolio **Independent Visual Art Practice** June 2015 – present Created original paintings and drawings and sold originals, prints, and commissions to clients across the U.S. Displayed artwork at the U.S. Capitol and selected for publication in local magazines and art anthologies Marketed art online via Instagram and website (www.annaeffenbergerart.weebly.com) using Google Analytics $oldsymbol{A}$ wards and $oldsymbol{\mathbf{R}}$ ecognitions Scholar, Merrill Presidential Scholars 2022 Selected as part of the top 1% of the 2022 graduating class at Cornell University Fellow, Theodore Eisenberg Research Fellowship 2022 Selected as Fellow to further empirical legal studies at Cornell University Fellow, D.E. Shaw's Zenith Fellowship 2021 Selected to explore the intersection of finance and technology at D.E. Shaw Scholar, Tripods Data Science NSF REU 2020 Selected as one of 15 scholars for the 2020 Tripods Data Science REU at the University of Rochester

2019

Interests: Golf (handicap 10); Tennis; Piano; Art; Graphic Design

Artwork Family Tree selected for display at the U.S. Capitol for one year

Best in Show, Congressional Art Competition, NJ District 4