### ae347@cornell.edu | annaeffen.github.io

# **EDUCATION**

Cornell University, College of Arts and Sciences, Ithaca NY

August 2019 – (expected) May 2022

B.A. in Statistical Sciences and Economics; Minor in Computer Science GPA: 4.1/4.0. Dean's List

Coursework: Machine Learning, Functional Programming, Object Oriented Programing and Data Structures, Discrete Structures, Stochastic Processes, Multivariable Calculus, Linear Algebra, Probability Models and Inference, Econometrics, Intermediate Micro-/Macro-Economics

Skills: Python, R, OCaml, Java, Microsoft Office (Excel, Word, PowerPoint)

# RESEARCH AND TECHNICAL EXPERIENCE

Goldman Sachs
New York City, NY

Quantitative Strategies Summer Analyst (Prime Risk 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, 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

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

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

- Explored fundamental natural language processing (NLP) questions with Python and R as part of the research project "Language and Behavior Dynamics in Collaborative Instruction Following" 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

**Data Science Project** 

Ithaca, NY

Researcher, Cornell Department of Statistical Sciences

January 2020 – present

- Examined juror questioning transcripts in death penalty cases using NLP tools in Python and R
- Investigated language used in the systematic removal of under-represented demographic groups from the juror pool through collaboration with the Cornell Law School, under the guidance of Professor Martin T. Wells

Commvault Tinton Falls, NJ

Software Development Intern

September 2018 – February 2019

- Self-taught Python, database skills (SQL), and object-oriented design principles through practical application
- Executed projects to create storage array-based snapshots using Python and HPE Nimble Storage arrays
- Implemented and enhanced REST-based calls to Commvault's Enterprise Backup and Recovery solutions

# **BUSINESS AND FINANCE EXPERIENCE**

The Cornell Hedge Fund (CHF)

Ithaca, NY

Chief Investment Officer

May 2021 – present

- 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

Analyst January 2020 – May 2021

- Informed investment decisions and reevaluated CHF's positions by monitoring holdings in CHF's portfolio
- 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

Vantage Brand Consulting (VBC) by Hospitality Sales & Marketing Association Intl.

December 2020 – May 2021

- Revitalized organization by restructuring the executive board, communication channels, and general body meetings to create a supportive environment with analysts committed to producing high quality work for clients

- Increased active analyst membership by over 180% and analyst retention to 80% between semesters

Project Manager September 2019 – December 2020

- Obtained new clients and led meetings for VBC's pro-bono sales and marketing consulting services
- Conducted market research to develop and adapt marketing and philanthropic strategy during COVID-19
- Designed strategy to increase the diversity of student populations served by client education non-profit

#### **Independent Investment Analysis Project**

August 2020 – September 2020

- Exploring correlations between historic stock movement and relevant popular online news sentiment using web-scraping and NLP tools in Python to identify indicators of future falls and rallies in individual stocks

#### **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

## AWARDS AND RECOGNITIONS

Fellow, D.E. Shaw's Zenith Fellowship

May 2021

Selected Participant, 2021 Citi Technology Early ID (EID) Program

February 2021

Selected Participant, 2020 Cornell Undergraduate Women in Investing (WIN) Conference

September 2020

Selected Participant, MongoDB Women in Computer Science Summit

August 2020

## Scholar, Tripods Data Science NSF REU

August 2020

- Selected as one of 15 scholars for the 2020 Tripods Data Science REU at the University of Rochester to study mathematical foundations of data science and to implement mathematical theory in applied research projects

# Finalist, Adecco Group U.S. 2020 CEO for One Month

May 2020

- Selected as one of ten finalists from over 6,000 applicants to attend Adecco's corporate strategy bootcamp

Selected Participant, Discover Bloomberg: Women in Engineering

April 2020

Selected Participant, Morgan Stanley Women's Early Insights

April 2020

#### Best in Show, Congressional Art Competition, NJ District 4

May 2019

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

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