

DAYNE J. FERNANDEZ
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EDUCATION

NEW YORK UNIVERSITY New York, NY

The Courant Institute of Mathematical Sciences

MS in Mathematics in Finance (expected – December 2020)

- **Coursework:** Software development for applications in finance, factor and principal-component models, Black-Litterman, arbitrage, Black-Scholes, Brownian motion, martingales

UNIVERSITY OF CALIFORNIA – LOS ANGELES Los Angeles, CA

BS in Mathematics (September 2014 – May 2018)

- **Coursework:** Multivariable calculus, differential equations, real and complex analysis, probability and statistics, computational statistics, advanced programming

EXPERIENCE

STARWORKS ARTISTS Los Angeles, CA

Accounting Assistant (2018-2019)

- Created and billed 15-25 invoices daily for client jobs, accounting for overtime and expenses
- Accommodated requests from clients for invoice revisions efficiently and accurately
- Collected receivables by reaching out to clients for overdue bills, assisting with payment as needed

UNIVERSITY OF CALIFORNIA – LOS ANGELES Los Angeles, CA

Undergraduate Researcher (June 2017 – August 2017)

- Developed general mathematical model to analyze crime and patrol strategies in national parks
- Assisted NGA refining patrol strategies to protect most densely forested 5%-10% of national parks
- Collaborated as part of a team of undergraduate students, graduate students, and professors
- Implemented model in MATLAB to create ~ 30 example cases for use in further research

SOTEIRA CAPITAL Las Vegas, NV

Hedge Fund Internship (2016)

- Assisted co-manager with portfolio building to generate 12% - 13% yearly returns, ~ \$300M AUM by executing orders for long and short positions in the 1K-10K volume range
- Researched positions by tracking securities' price differentials and monitoring financial news
- Implemented algorithm to compute maximum profit and loss on option positions

PROJECTS

UNIVERSITY OF CALIFORNIA – LOS ANGELES Los Angeles, CA

Modeling Environmental Crime in Protected Areas Using the Level Set Method (June 2017 – August 2017)

- Developed general mathematical model to analyze environmental crime and patrol strategies
- Applied game theoretic concepts and PDE solving methods to optimize crime prevention
- Implemented model in MATLAB to create ~30 example cases for use in academic paper
- Published in SIAM Journal on Applied Mathematics

SOTEIRA CAPITAL Las Vegas, NV

Python Program to Track Trades and Profit/Loss (2016)

- Compiled a spreadsheet to list trades and track P/L for specific securities for a trading account
- Wrote a Python script to automatically update spreadsheet daily by reading and writing trade data
- Implemented “security” and “trade” as classes in Python, saved each trade and security as an object to format the data and calculate new P/L
- Generalized code to store different security types (stocks, options, futures) simultaneously

COMPUTER SKILLS/OTHER

Programming Languages: C++, Java, Python, R, SQL

Other Software: MATLAB, Microsoft Office

Certifications: Machine Learning, Stanford University – Coursera; SQL for Data Science, UC Davis – Coursera