DYLAN JORLING, CFA

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Versatile professional with a strong educational background, proven adaptability, and a track record of solving complex problems to generate substantial value. Skilled in using advanced analytical techniques and machine learning algorithms to extract meaningful insights and drive informed decision-making. Excellent communicator, adept at translating complex technical concepts for diverse stakeholders. Seeking challenging quantitative roles to leverage my full skill set for significant organizational impact.

CORE COMPETENCIES AND AREAS OF EXPERTISE

- Quantitative Finance
- Time Series Analysis
- Statistical Inference and Modeling
- Machine Learning in Python
- Natural Language Processing
- Deep Learning
- End-to-End Data Management & Analysis
- Database Querying and Design
- Data Visualization & Dashboard Design

PROFESSIONAL EXPERIENCE

Principal Quantitative Risk Analyst Portland General Electric, (Remote/Portland, OR) **Nov 2023-Present**

- Develop and implement new methodologies to quantify portfolio risk in a transitioning renewable energy environment, leveraging analytical and numerical techniques to model increased stochasticity of renewable power generation sources
- Lead quantitative analysis of new trading strategies, structured derivative contracts, and RFPs, ensuring comprehensive evaluation of their financial impact. Effectively communicate these findings to diverse stakeholders to support informed decision-making
- Spearhead continuous innovation in risk analysis processes through extensive research, resulting in significantly improved modeling
- Design improved risk reports to provide a clearer and more comprehensive portrayal of firm portfolio risk
- Develop and maintain Python and SQL code to automate analysis processes, increasing departmental efficiency

Portfolio Manager (Precious Metals): Belvedere Trading, Chicago IL **Mar 2019-Sep 2022**

- Executed high-level decisions combining trading experience with a data-driven approach to maximize profit and limit risk exposure as head of the firm's 5-person precious metals desk, resulting in over $20M in trading profit vs a $10M target
- Applied rigorous mathematical and statistical methods such as optimization and linear regression on large datasets to continuously optimize thousands of model inputs related to asset valuation and scenario analysis, resulting in consistently high EV positions
- Leveraged strong analytical background to complete impactful projects that were subsequently adopted by other teams, including developing a stock-future arbitrage strategy, systematizing scenario-based correlations, and automating electronic trading inputs
- Generated Jupyter Notebook Python scripts used to both maximize current trading strategy profitability and identify new opportunities, utilizing extensive amounts of data and applying time series analysis techniques with Pandas
- Product Owner, Roboto Team (4 years): Acted as the primary trader-facing liaison responsible for leading presentations and product education for the automation-driven Roboto technology team; represented the firm's trading team in monthly Roboto strategy meetings alongside developers and company stakeholders, and helped identify, evaluate, and prioritize future team projects
- Head of Belvedere Applications (4 years): Lead the firm's in-house software education program through content creation, instructor training and collaboration with the two other department heads to iteratively improve the firm's educational program as a whole
- Selected as a member of the firm's 20-person recruiting team for 7 years with duties including one-on-one first round interviews, leading the mock-trading super day assessment and having large input in determining which candidates the firm extended offers to

Senior Derivatives Trader (Natural Gas): Belvedere Trading, Chicago IL **May 2016-Feb 2019**

- Executed 75% of the desk's trading volume in both broker and electronic markets
- Successfully managed the entirety of desk operations when the Position Manager was out-of-office, taking on added responsibilities including adjusting model values, coordinating with the other 3 traders on the desk, and managing the desk's risk exposure
- Researched profit-generating strategies outside of the desk's core area of expertise, including leveraged ETF option arbitrage, seasonality strategies and futures-ETF arbitrage, the last of which was profitably used in production

Derivatives Trader (S&P 500 Index): Belvedere Trading, Chicago IL **Aug 2013-Apr 2016**

- CBOE floor trader specializing in SPX options open-outcry trading as a member of the firm's largest and most profitable desk
- Contributed thoughtful insights and opinions during daily desk discussions regarding position management and daily trading goals
- Product Expert for UI team: Created proprietary technology documentation and formally educated all traders on new releases

KEY PROJECTS

UCLA Master's Thesis: Building an Options Portfolio with Deep Learning **Oct 2022-Mar 2023**

- Developed the proof-of-concept Options Portfolio that takes daily long/short implied volatility positions in 315 underlying securities, leveraging the state-of-the-art Transformer Model as a foundation; designed a data visualization dashboard using Plotly and Dash
- Collected 15 years of daily financial time series data with 10 daily features and used the PyTorch framework to design and train various end-to-end deep learning models that directly maximize the Sharpe Ratio, resulting in the Options Portfolio significantly outperforming all baselines and showing tremendous potential for use as an actual trading strategy

International Soccer API, Database and Betting Model **Aug 2023-Present**

- Developed and deployed a Flash API serverlessly using AWS Lambda, enabling seamless data scraping from soccer website fbref.com
- Created a robust, automated database that updates the latest team, player, and match stats, ensuring up-to-date data for analysis
- Utilize database data to design complex player-based transformer model to predict soccer scores and generate betting alpha

Exploring Fan Sentiment in the Digital Realm (NLP) **Mar 2023-May 2023**

- Collected 150,000 posts and comments from the L.A. Lakers reddit and utilized advanced NLP techniques such as custom entity recognition, part-of-speech and coreference resolving, and intricate lexicon adjustments with spaCy and vaderSentiment to extract fan sentiment towards each player on the Lakers through the course of the NBA season
- Scraped player and team statistics, joined data with sentiment ratings to unlock valuable insights relating player sentiment with on-court performance and designed an impressive dashboard displaying interactive visualizations for each element of the study

EDUCATION, CERTIFICATIONS, CODING SUMMARY

The University of California, Los Angeles (UCLA) **GPA: 4.00/4.00**
Master of Applied Statistics *Jun 2023*

Boston College CSOM Honors Program **GPA: 3.6/4.0**
Bachelor of Science in Management: Concentrations in Finance, Accounting; Minor in Mathematics *Aug 2013*

CFA Charter Holder *August 2017*
TensorFlow Developer Certificate: Google Developers *June 2023*
Machine Learning Scientist with Python: DataCamp *March 2023*

Python (4+ years) TensorFlow | PyTorch | scikit-learn | huggingface | pandas | plotly| Dash | SpaCy | SQLAlchemy | nltk | statsmodels | scipy
Miscellaneous: R | SQL | AWS Lambda | git | github | AWS RDS| Tableau| Docker