JOSEPH SOTOMAYOR

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EDUCATION

Villanova University (Villanova, PA)

■ Master of Science of Analytics: **GPA:** 3.44/4.0

August 2020

Bachelor of Arts of Economics, Fluency in Information Technology Certificate

May 2018

Saint Anthony's High School (South Huntington, NY)

June 2014

• GPA: 3.8/4.0; National Honor Society; 4x Duns Scotus Award Recipient (Given to students with an exceptional GPA)

TECHNICAL SKILLS

- Proficient in R, SQL, Python, Microsoft Azure, TypeScript, JavaScript, Angular, Alteryx, Tableau, JMP, Excel
- Adept in the performance of data mining to uncover patterns essential in transforming data into actionable intelligence
- Skilled in regression analysis, logistic regression analysis, and ANOVA to gain deeper insight into the relationship of variables
- Constructed machine learning models and simulation models to replicate real-world systems and to make predictions about the future
- Developed optimization models to determine best input variables to minimize or maximize an objective function

WORK EXPERIENCE

KPMG-Tax Ignition, Full Stack Engineer/Data & Analytics Associate (New York, NY)

January 2021 – Present

- Work on a team developing NLP applications that extract valuable tax and financial information from text data
- Consistently learn new programming languages on the fly to boost contributions to my team (Typescript, Python, C#)
- Receive mentoring from UI, ML, and backend engineering experts
- Design and build front end architecture to optimize data flow, data accuracy, and user experience
- Integrate custom-built APIs to retrieve and record data to perform data manipulation using Typescript, C#, SQL, and CosmosDB
- Perform high volumes of ETL on large datasets using Python and Alteryx to ensure usability
- Construct storytelling data visualizations using JavaScript
- Build tools to automate integral tax functions and calculations to identify tax benefits amounting to billions of dollars using Alteryx

Roxboro Inc, Data Analyst (Part time 15hr/week)

January 2020 - Present

- Gather real estate data from various sources and perform ETL process to produce complete datasets to be used for analysis
- Applied statistical methods to uncover how a single-family property's attributes affect its value using Python and R
- Perform data mining process and develop machine learning models to discover patterns in real estate data using Python and R
- Underwrite and perform intensive due diligence on each prospective property to calculate financial impact of investment

J.P. Morgan Chase, *Advisor Development Program* (Woodbury, NY)

May 2019 – September 2019

- Worked alongside experienced financial advisors, identifying financial objectives of individual investors with account sizes ranging from \$500,000 to over \$1,000,000, and aligning them with suitable investment products
- Developed unique tax sheltering strategies to protect the wealth of high-net-worth investors during account rollovers
- Increased investment acumen through monthly remote/virtual trainings with rotating, investment specific themes

MassMutual-uFinancial Group, Wealth Management Intern (Philadelphia, PA)

June 2017 - May 2018

- Highest performing intern in the Philadelphia office, adding 7 clients to the team's book of business
- Organized and initiated marketing strategy, scheduling meetings to discuss financial goals and wellness with prospective clients

PROJECTS

Binary Options Research (Crude Oil, Forex), Personal Project

Fall 2019-Present

- Collect Crude Oil and Forex data from a variety of sources and manipulate into desirable formats for analysis using python and R
- Implement Neural Networks, ARIMA, and Monte Carlo to forecast prices of assets (Scikit-learn, TensorFlow, PyTorch)
- Apply regression, ANOVA, and ML to study how news and tweet sentiment relates to movements in price using R (Syuzhet)

Analysis of College Football Productivity and NFL Productivity, Personal Project

Summer 2021

Used R and Python to uncover most significant indicators of NFL productivity by position through data mining process

Investment Portfolio Optimizer, Personal Project

Spring 2021

Designed optimization model to help guide personal investment account using python (PyPortfolioOpt, Pandas, NumPy)

ATHLETICS & VOLUNTEERING

Varsity Athlete, Linebacker, Villanova University Football Team

June 2014 – December 2018

- National College Athletic Association (NCAA) Division 1 football player 2014 National Quarter Finalist
- Pushed self to become an elite-level athlete while balancing a 50+ hour per week commitment with a full course load
- Voted *Keeper of the Flame* by teammates an award given to the player that relentlessly improves themselves and others, on the field, in academia, and the community

American Jiu Jitsu Black Belt

■ 2010 North American and East Coast Grappling Champion; ~10 years of rigorous training developing self-discipline and persistency

Andy Talley Bone Marrow Foundation Ambassador

September 2014 – May 2018

• Registered several thousand students in the "Be The Match" Bone Marrow database leading to 300+ transplants

OTHER INTERESTS

• Roman history enthusiast, reading about Quantum Physics, avid weightlifter, learning basic German and Japanese, culinary arts