

# Richie Subodh Sawant

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## **OBJECTIVE**

To pursue a career in Finance and Insurance as a Quant where my advanced skills in math, statistics, programming, risk management, data science, and actuarial science, to name a few, coupled with astute decision-making, innovation, and problem-solving, will make a significant contribution to the company's success.

## **EDUCATION**

**Rutgers Business School - Newark, New Jersey**

**(Aug' 19 - May' 21)**

**Master of Quantitative Finance**

- Courses: Financial Time Series, Statistics and Machine Learning, Object-Oriented Programming System 1&2, Financial Modelling, Derivatives Pricing Theory, Econometrics, Numerical Analysis for Quants, Fixed Income.
- Recommendation Letter by Professor Andrzej Ruszczyński for Stochastic Calculus Course.

**Indian Institute of Technology Bombay - Mumbai, Maharashtra, India**

**(Jul' 14 - Aug '18)**

**Bachelor of Technology in Chemical Engineering**

- Ranked amongst the top 0.08% of the 1.4M students in the IIT-JEE Advance Entrance Exam.

## **WORK EXPERIENCE**

**Financial Engineering Intern, ETFication.com - New York, New York**

**(Jun' 20 - Aug' 20)**

- Improved the algorithm which forms the core of the portfolio management for ETFication's Robo-Advisory Service.
- Optimized Asset Allocation model for the algorithm using the Black-Litterman model while decreasing the computational time by a substantial 10-15 seconds.
- Wrote white papers on Risk Management with a focus on making onboarding simple for prospective clients.

**Data Scientist Intern, Tata AIG General Insurance Company - Mumbai, Maharashtra, India**

**(Nov' 18 - Jun' 19)**

- Streamlined the Business Intelligence team's Data-Management Processes by automating and improving the data processing/manipulation, mapping, and visualization processes into a R-Shiny App along with its documentation.
- Impacted the efficiency by Reduced 5-6 hours of real manual work in data processing into a 10-minute process in the App.
- Aided the non-technical teammates by teaching the R language and explaining the Data and the App along with its features.

## **TECHNICAL SKILLS**

Programming Skills: C++, Python, R, MATLAB, Java, SQL, OOP, Data Structures. Algorithms, Scripting Languages

Data Science Skills: Advanced Statistics, Machine Learning, Deep Learning, Cloud-Computing, Hadoop, Tableau, GCP, AWS

Other Quant Analysis Skills: ESG, Crypto-Currency, Data Privacy, Regulations, Alternative Data Sources, Event-Driven investing

## **PROJECTS**

**Estimating Stock prices using VAR/VECM (Financial Time Series Course Project)**

**(Feb' 20 - May' 20)**

- Forecasted the stock prices of the Healthcare and Energy sector's stock from the DJIA index in a team of 3.
- Attained a fantastic 70% directional accuracy using Vector Autoregression/Vector Error Correction Model.
- Obtained very low RMSE values of 5% and 7% respectively these stock returns suggesting accurate results in this model.

**ETF Library and Comparison Web App (OOPS 2 Course Project)**

**(Mar' 20 - May' 20)**

- Headed the team that created a Web App using Flask that extracts ETF information and compares to similar ETF and/or other ETFs of our choice just by entering the ETF Ticker in under 5 seconds.
- Reduced the time involved in making investment decisions by hours, giving the user an edge over his/her competitors

**Portfolio Management Project (Financial Modelling Course Project)**

**(Jan' 20 - May' 20)**

- Headed a team that managed an imaginary Asset Management Fund from January 2020 to April 2020 (COVID Times).
- Achieved a whopping 4.99% Return beating DJIA's -16.9% in the same period.
- Implemented a tweaked method in Portfolio optimization where data from black swans was used to make decisions.

**Credit Default Risk (Statistics and Machine Learning Course Project)**

**(Jan' 20 - May' 20)**

- Headed the team that evaluated Credit Default risk from Lending Club data with the use of Python for Logistic Regression, Adaboost Model, Gradient Boosted Trees, Naïve Bayes Model along with the analysis of the model output.
- Achieved an AUC score of 98% in the Naïve Bayes Model. Implemented Univariate and Multivariate Analysis in Tableau.

## **EXAMS AND CERTIFICATIONS**

- Seven Actuarial Exams (Passed and Exempted) - CT1, CT2, CT3, CT5, CT6, CT7 and CT9
- CFA Level I Passed.
- Bloomberg Market Concepts Course with Portfolio Management Track.
- DataCamp.com: Data Scientist/Machine Learning in Python. Hackerrank.com: Problem Solving, 5 Star Gold
- Participated in the CME Futures trading competition in Oct '19.
- Cloud Computing Concepts and Introduction to American Law on Coursera.com, MATLAB Master class on Udemy.com.