Alex Varghese

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Education

Rutgers University, School of Arts and Sciences — **New Brunswick, NJ**
Bachelors of Arts in Computer Science — September 2011-May 2015
Bachelors of Arts in Mathematics
Bachelors of Arts in Statistics
Minor in Operations Research — Cumulative GPA: 3.98

Work Experience

Citigroup — **New York, NY**
Associate in Multi-Asset Group Structuring (LATAM) — August 2017-Current

- Provide new structures for retail and institutional clients from Central and South America
- Collaborate with teams in different regions to further develop the Autopricer
    - Work on Autopricer interface to add functionality for greater flexibility in pricing
    - Develop tools for Autopricer Initiative to service our sales desk and clients faster
    - Write simple scripts to connect current Autopricer to existing web interface
- Gain experience with pricing institutional type structures
- Second year analyst responsibilities (see below)

Citigroup — **New York, NY**
Second Year Quant Sales & Trading Analyst in Multi-Asset Group Structuring — August 2016-August 2017

- Price exotic derivatives on indices, single stocks, and baskets
    - Develop an understanding of exotic option pricing models (PDE and Monte Carlo)
    - Responsible for flow from North American retail clients
- Collaborated with team to create the Autopricer, a tool used to automate the pricing of more vanilla structures
    - Manage daily operation of Autopricer and deal with troubleshooting issues
    - Manage the database for Autopricer to analyze its usage and effectiveness
    - Gather and analyze data every month on pricing requests to better target customer base
- Analyze market to identify themes for the Playbook and consult sales to determine client interest
    - Create back tests on particular structures to show their profitability compared to vanilla products
    - Pitch developed Playbook structures to sales team in monthly meetings
- Participate in deal process from idea generation to execution and regularly consult Trading, Sales, Legal, and Treasury to ensure smooth transactions for clients
    - Assist in the optimization of the client manager to help speed up the process of closing deals

Citigroup — **New York, NY**
First Year Quant Sales & Trading Analyst in Mortgage Analysis — June 2015-August 2016

- Developed various tools and worked on ad hoc projects for the trading desk
    - Created an LTV bucketing tool to analyze different trends in CPRs (conditional prepayment rates)
    - Created scripts to analyze PnL distribution for various mortgage-backed securities
    - Managed and updated databases for MQA and the trading desk
- Supervised the Yield Book nightly calibration process and automated manual portions of the jobs
    - Ran a daily sync run which consumed daily pricing data and checked for data quality
    - Collaborated with the Yield Book team so clients would have access to systems and data after close
    - Automated and generated monthly prepay and delinquency reports
- Received quarterly CCAR scenarios from the risk team and ran stress tests

Skills

Technical

- Java (Proficient)
- SQL, Python, C, C++,VBA (Intermediate)
- MATLAB, SAS (Basic)