**Dan Mateescu**

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**PROFILE SUMMARY**

* Ability to implement quantitative financial models used for pricing derivative securities such as options, futures, swaps, in C++, MATLAB, Excel, and C#.
* Experience with data analysis and web scraping in Python, and experience with MySQL
* Finalist in Quantopian algorithmic trading contest
* Experience applying statistical processes to analyze data.
* Knowledge of financial risk management methodologies including Value-at-Risk and Conditional Tail Expectation.
* Have a Bachelor’s degree in Mathematics.
* Have a quantitative finance blog on which I have posted the various projects I have completed.

**EDUCATION**

BA Specialized Honours in Mathematics, York University (2009-2013)

Relevant projects completed in school:

* Black Scholes options pricing model (along with calculation of “The Greeks”) for European Options in C++ as well as in Excel/VBA.
* A model that utilizes Monte Carlo simulation with control variates to price Asian Options in C++, as well as in MATLAB.
* Finite difference method for pricing European and barrier options in Matlab.
* Gaussian Copula that models the joint behaviour of two random variables in C++.
* Linear and nonlinear solvers as well as differential equations solver in C++.
* Heston model for pricing options in C++.

**PREVIOUS WORK EXPERIENCE**

YCR Co. – Profitability & Risk Assessment Analyst (2013-2014)

* Helped to analyze the viability of opening another office within the commercial real estate division
* Helped to determine the most efficient allocation of resources and to maximize revenue and minimize risk by using regression analysis to forecast the number of deals completed based on different variables and scenarios.

Prudential, Royal LePage - Real estate agent assistant (2008-2010)

* Database management.
* Real Estate market analysis.

-utilized data based on comparable properties

-after several regression runs, the data was ranked by statistical significance and the least statistically significant variables were eliminated

-utilized the regression equation to estimate the market value of the property

Prudential - Real estate agent assistant; 6 month contract (2015)

* Helped decide whether to buy a new brokerage or to expand by hiring new sales agents

-analyzed historical data using a regression model to estimate the potential revenue from

both scenarios

-compared the cost involved with each scenario with the estimated revenue and determined

which scenario results in the highest expected profit

**SKILLS AND COMPETENCIES**

* Knowledge of the following financial products: stocks, bonds, options, futures, swaps.
* Ability to read, interpret, and analyze financial statements, and to implement risk management models.
* Strong quantitative skills.
* Ability to create trading algorithms utilizing several strategies – i.e. Long/Short Equity, mean reversion, moving average crossover.
* Solid programming background in the following languages: Python, C++, MATLAB, Excel.
* Ability to analyze data and scrape websites in Python
* Creating and maintaining databases in MySQL and the ability to run queries
* Self starter with strong work ethic and able to adapt quickly in a dynamic work environment.
* Exceptional verbal and written skills.
* Willing to continuously build my knowledge base and learn new things
* An adept problem solver with the ability to think logically and strategically.

**EXTRACURRICULUAR ACTIVITIES**

* My quantitative finance and mathematics blog: <http://quantessence.wordpress.com/>
* Played hockey at Hillcrest Village M.H.A from 2001 to 2003.