

EDUCATION

Masters in Analytics, University of San Francisco	July 2014 -present
Masters in Financial Engineering, Carnegie Mellon University & Nanyang Business School	Aug 2010 – Jul 2011
MBA in Finance, Institute of Financial Management and Research (IFMR), India	Jul 2008 - Mar 2010
Bachelors in Electrical and Electronics Engineering, University of Kerala, India Graduated with distinction - top 1% of cohort	Sep 2003 - Jun 2007

CERTIFICATIONS

GARP Financial Risk Manager(FRM level I)	Nov 2013 - present
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PROFESSIONAL EXPERIENCE

MUREX S.A.S Pvt Ltd, Singapore , Financial Engineer, Equity Derivatives Aug 2011 - May 2013

- Supported trading desks of major Asian banks such as DBS, OCBC and ANZ on queries regarding structuring, pricing models and sensitivities (greeks) of equity derivative exotics within the Murex system.
- Validating payoffs of exotics including accumulators, autocallables, callable range accruals, convertible bonds etc.
- Research new generation exotics and its implementation within the Murex system.
- Coordinated new feature development efforts.(Call-spread, twin-win and memory features for autocallables, fixing risk and barrier management features etc.).
- Conducted client training on new features and overseen troubleshooting production issues
- Managed projects involving product upgrades, new feature deliveries for major Equity desk clients.

REAL TIME SYSTEMS Pvt Ltd (RTS), Singapore | Solutions Manager (Internship) Jan 2011 – Apr 2011

- RTS provides algorithmic and high frequency trading solutions
- Designed and implemented algorithms based on Implementation Shortfall strategies including TWAP, VWAP, Peg, Iceberg Orders etc.
- Developed automated trading strategy to seek arbitrage between CME and MCX crude oil futures.

JWT , India | Business Development (Internship) Apr 2009 - May 2009

- Worked with the Planning and Accounts Division. Created a business plan to identify new areas of housing developmental activities in the midst of a decline in Indian housing industry.
- Developed SPSS based predictive models to identify consumer demand using principles of Multiple Regression Analysis.

NOTABLE ACADEMIC WORK & SIDE PROJECTS

- **Data Modelling:**Analysed data on peer-to-peer loans issued by Lending Club,US. The aim was to identify the variables explaining difference in interest rates between borrowers having the same FICO scores(credit score)
- **Data Modelling & Prediction:** Analysed the Samsung smartphone accelerometer and gyroscope data to predict the user's activity vis-a-vis running,walking,lying,climbing uphill/downhill etc. A prediction accuracy of 91% was obtained.
- **Pricing and simulation:**Conversant with the use of Monte Carlo simulation to solve significant computational finance problems including pricing early exercise options, interest-rate-dependent claims, and credit derivatives.
- **Pricing & Structuring:**Structured a unique hybrid credit derivative for pricing distressed defaults – Knock-in barrier option with payoff as MTM of EUR/USD future; model calibration based on Monte Carlo simulation; reduced price to 50% of a vanilla CDS.
- **Sentiment Analysis:** Performed sentiment analysis on movie reviews based on Naive Bayes techniques.
- **Data Acquisition:** Explored APIs of eBay, Amazon and Goodreads to obtain a book comparison rating system

RELEVANT SKILLS

- Programming in Python, C, C++,SQL, Matlab, R,statistical packages like SPSS(PASW) and EViews