

# ARVIND KUMAR

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## EDUCATION

CARNEGIE MELLON UNIVERSITY, TEPPER SCHOOL OF BUSINESS	Pittsburgh, US
Master of Science in Computational Finance - MSCF	12/2012
<ul style="list-style-type: none"><li>An interdisciplinary program including finance, mathematics, statistics and programming that prepares students for opportunities in Sales and Trading, Quantitative Asset Management and Risk Management</li><li>Honors: Recipient of Merit Scholarship for MSCF program</li></ul>	
INDIAN INSTITUTE OF TECHNOLOGY KANPUR	Kanpur, India
Master of Science in Mathematics and Computing	5/2008
<ul style="list-style-type: none"><li>An interdisciplinary program including Mathematics, Statistics and Computer Science.</li><li>Department Rank 3 across all the courses in the 5 Years Integrated Master's program</li></ul>	
INDIAN INSTITUTE OF TECHNOLOGY KANPUR	Kanpur, India
Bachelor of Science in Mathematics and Computing	6/06
<ul style="list-style-type: none"><li>Represented IIT Kanpur at the National Mathematics Camp at Jadavpur University, Kolkata.</li></ul>	5/05-6/05

## EXPERIENCE

ERNST & YOUNG (EY)	New York City
Senior Associate, Complex Securities Valuation Group	2/13-Present
<ul style="list-style-type: none"><li>Assisted clients with the valuation of illiquid debt, options, warrants, callable notes, convertible notes, preferred and common securities for public and private companies.</li><li>Assisted clients with valuations for financial reporting, tax, investment planning, structuring fixed income derivatives and structuring complex compensation arrangements in the complex equity, interest rate, FX and commodity markets. The work entailed designing valuation models using numerical techniques including Monte Carlo simulations, finite differences and lattice models.</li><li>Assisted clients with the quantification of risks inherent in real options and non-linear payoffs, including contingent considerations and valuation of these instruments using option pricing techniques. Also assisted clients with the valuation of warrants, management compensation, and other kinds of securities in privately held companies using option pricing techniques.</li><li>Assisted large financial institution in validating their financial models. The work entailed validation of a complex model for calculating default exposure of a stable value wrap contract for a multibillion dollar pension fund portfolio. The work involved term structure calibration of multifactor interest rate model, and modelling of pension fund contract with tiered cash flow structures among other things.</li><li>Assisted large financial institutions with model development for Basel and CCAR purposes. The work entailed development of loan and lease LGD model in the aircraft leasing industry.</li></ul>	
ERNST & YOUNG (EY)	New York City
Intern, Complex Securities Valuation Group	5/12-8/12
<ul style="list-style-type: none"><li>Implemented a new convertible bond model in Matlab using Finite Differencing techniques. Also performed back-testing for model performance using real market data and compared the results against a lattice based convertible bond model.</li><li>Assisted clients with valuation of options, warrants, and common and preferred securities.</li></ul>	
DEUTSCHE BANK, GLOBAL MARKETS	Mumbai, India
Senior Analyst, Global Credit Trading	1/10-7/11
Analyst, Global Credit Trading	7/08-12/09
<ul style="list-style-type: none"><li>Performed risk management services for global credit trading desks in various product categories like interest rate swaps, credit default swaps, corporate and sovereign bonds, asset swaps, basis swaps, foreign currency swaps and other instruments.</li><li>Helped traders understand and quantify the credit, interest rate, FX, and other forms of risk using various quantitative techniques for both single names and portfolios, which involved developing complex excel based models to capture the trade dynamics and hedging techniques.</li><li>Helped trading desks manage their credit risk by focusing on large positions, identifying effective hedging strategies, scenario analysis, worst case loss prediction, correlation analysis and other techniques.</li><li>Helped trading desks manage and test their interest rate/credit spread marking tools, identified issues for any inconsistency with traded prices and took corrective actions using the help of other quantitative support groups.</li><li>Helped trading desks understand the regulatory requirements, quantified the impact of new regulatory requirements on their new and existing trading and hedging positions, and proactively managed their regulatory risks by performing scenario analysis and risk forecasting on big material positions.</li></ul>	

## ADDITIONAL INFORMATION

- Certifications: CFA level 2 candidate for the June 2015 exam.
- Interests: Running, Driving, Reading about markets, Visiting new places
- Programming: C++, SQL, VBA and MATLAB
- Participated in the recruitment events for new Analysts at Deutsche Bank. Groomed and acted as a peer advisor for a number of new hires and interns at EY.
- Among the top 1.5 percentile among the 170,000 candidates appeared in the IIT-JEE test 2003.