Radhika Anand

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Education_____

2014-2016 (exp)	**Duke University, NC, USA**	CGPA: 4/4
	Master of Science in Statistical and Economic Modeling	
	First Semester coursework: Predictive Modeling, Bayesian Statistics, Statistical Programming	

2009-2014	**Birla Institute of Technology and Science, Pilani, India**	CGPA: 9.23/10
	Master of Science (Hons.) Economics and Bachelor of Engineering (Hons.) Computer Science	Major GPA:10/10

Work Experience_____

01.2014 – 05.2014   **@WalmartLabs, Bangalore, India**
Semester Internship (Data Science)

Team: Competitive Intelligence and Analytics (CIA), @WalmartLabs

- Implemented Modularity Maximization and Spectral Bisection to perform Community Detection to create virtual baskets of Walmart items that tend to sell together
- Handled terabytes of Walmart data to find actionable insights like market share drop, price increase etc.

08.2013 – 12.2013   **KOF Swiss Economic Institute, ETH Zurich, Switzerland**
Semester Internship (Statistics)

Project: Short-Term Electricity Trade Forecasting for Switzerland

- Applied Neural Networks to conduct rolling out-of-sample forecasts from 2002 onwards & achieved 21% lesser out-of-sample RMSE compared to the existing ARIMA model (which has now been replaced by this model)
- Independently submitted electricity trade forecasts for July to Dec. 2013 to the Swiss Federal Customs Administration

05.2012 – 07.2012   **University of Passau, Passau, Germany**
Summer Internship (Econometrics)

Project: Forecasting of Future Energy Demands using Statistical Techniques

- Predicted energy demands across various breweries in Germany using ARIMA & VAR
- Focused on trend, seasonal and cyclical time-series forecasting

05.2011 – 07.2013   **Bhabha Atomic Research Centre (BARC), Mumbai, India**
Summer Internship (Topology)

Project: Development of Structured Mesh Modules using Topology & Computer Graphics

- Created modules to construct generalized shapes, using structured grids, which could be clustered to model real-life objects

Skills_____

Computer Skills	Languages:	C, Python, C++, R, Stata, Matlab, SQL
	Big Data Platforms :	Hadoop, Hive

Coursework	Probability & Statistics, Multivariate Calculus, Matrix Algebra, Data Structures and Algorithms, Database Systems, Operating Systems, Optimization, Operations Research, Pattern Recognition, Econometrics, Microeconomics, Macroeconomics, Money Banking and Financial Markets

Achievements

Publications | **Published**

Radhika Anand and Shachi Madhogaria. (2012). "Is Gold a Safe-Haven? – An Econometric Analysis," Procedia Economics and Finance Journal. 1, pp. 24-33.
- Studied the correlation and causality relation between Gold & Stock prices
- Won the 'Best Paper Award' in APOGEE (BITS annual technical festival), 2012
- Presented at the International Conference on Applied Economics (ICOAE), 2012 in Uppsala, Sweden

Honors | **Scholarships and Awards**

- Masters in Statistical and Economic Modeling Award, 2014, for tuition waiver at Duke University
- Sir Ratan Tata Education Travel Grant, 2014, India
- Mitacs Globalink Fellowship, 2013, Canada
- DAAD-WISE Scholarship, 2012, Germany
- Indian Academy of Sciences' Summer Research Fellowship, 2012, India
- OP Jindal Engineering and Management Scholarships (OPJEMS), 2012, India
- Scholar Badge for academic excellence from 2005-09, Delhi Public School, RK Puram

Semester Projects

01.2013 – 05.2013 | **Forecasting using Social Media Networks**

- Used Twitter and sentiment analysis to predict daily candidate popularity ratios for 2012 US Elections using ARIMA approach with an aim to replace traditional polling methods with cheaper, accessible & largely untapped social media platforms

01.2012 – 05.2012 | **Stock Trading using Fuzzy Logic**

- Devised a stock trading model using 4 technical indices: CCI, RSI, MACD and Bollinger bands to help traders take BUY/SELL decisions regarding a stock.

07.2011 – 12.2011 | **Betting on the Initial Public Offering (IPO): Observations from Indian Stock Market**

- A quantitative analysis of the price performance of IPOs across all sectors, of all the companies that had gone public from 2006 to 2010.

Additional Experience

07.2012 – 05.2013 | Co-Founder of the venture Stockr, which aimed at making intraday trading viral in India. I particularly worked on Forecasting of Future Stock Prices using Neuro-Fuzzy Methods.

06.2009 – 07.2009 | Worked with World Famous Indian Mathematician and Book Writer, DR. R.D. Sharma, and wrote two chapters on Differentiation and 3-D Geometry in his book for 12th standard Mathematics.

Extra-Curricular Activities

08.2009 – 05.2013 | Group Leader and Core Member, Department of Theatre, BITS Pilani

08.2010 – 05.2013 | Member of BITS Pilani's parliamentary debating team
Won the best adjudicator award at 2nd IIT Bombay debate

01.2012 – 05.2012 | Head, Publicity and Correspondence, QED, BITS Annual Parliamentary Debating Tournament

08.2011 – 05.2012 | Captain, Girls' Lawn Tennis Team, BITS Pilani
Won Silver, Bronze and Gold at 3 consecutive BITS Open Sports Meets (BOSM) for Girls' Lawn Tennis

08.2011 – 05.2012 | Sports Secretary, Meera Bhawan (girls' hostel), BITS Pilani

12.2011 – 12.2011 | Worked at a NGO Sampurna in Delhi, dedicated towards solving problems faced by teenage girls

Hobbies

Hiking, mountain biking, swimming, classical rock music!