

DEVDEEP SARKAR

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EDUCATION

CARNEGIE MELLON UNIVERSITY, TEPPER SCHOOL OF BUSINESS New York, NY
Master of Science in Computational Finance – MSCF 12/12

GRE Quant: 800/800

- An interdisciplinary program including finance, mathematics, statistics and programming
- Award: Merit Scholarship
- Memberships: Quantitative Finance Club, Graduate Finance Association
- Spearheaded a team of six students in Intl. Assn. of Fin. Eng. case competition: 'Modeling Sovereign Credit Risk'

UNIVERSITY OF CALIFORNIA, IRVINE Irvine, CA
Doctor of Philosophy in Physics – Ph.D. 06/09

GPA: 3.9/4.0

- Research Focus: Theoretical and Computational Cosmology and Astrophysics
Dissertation: "Cosmological Explorations: From Primordial Non-Gaussianity to Dynamical Dark Energy"
- Publications: 10 Published articles in leading international peer-reviewed journals with 400+ citations
- Award: Regents' Fellowship in addition to Full Scholarship
- Transferred from Univ. of Kansas (2003-06; GPA: 3.94/4.0) to get a broader exposure to the field of Cosmology

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR Kanpur, INDIA
Master of Science in Physics 06/03

- Award: Prize for the Best Master Research Project

UNIVERSITY OF CALCUTTA Kolkata, INDIA
Bachelor of Science in Physics 06/01

- Award: Gold Medal in National Graduate Physics Examination, Scholarship for Top (1%) Rank in the University

COURSEWORK/SKILLS

- **Finance:** Fixed Income, Options, Multi-Period Asset Pricing, Corporate Finance, Macroeconomics
Spring 2012 coursework includes: Financial Products and Markets, Financial Time Series Analysis
- **Mathematics:** Linear Algebra, Multivariate Calculus, PDEs; Spring 2012 course: Stochastic Calculus
- **Statistics:** Probability, Statistical Inference; Spring 2012 courses: Linear Financial Models, Simulation methods
- **Programming Skills:** C++, C, R, Matlab, MS Excel, VBA (Platforms: Unix/Linux, Windows, Mac)

EXPERIENCE

DEPARTMENT OF PHYSICS, UNIVERSITY OF MICHIGAN Ann Arbor, MI
Postdoctoral Research Fellow 07/09 – 07/11

- **Leadership:** Spearheaded two research projects (and mentored graduate students) on early universe physics
- **Quantitative Modeling:** Applied advanced mathematical techniques (including linear algebra, tensor calculus) and cutting-edge statistical tools to build analytical framework for studying multidimensional cosmological models
- **Numerical Methods:** Implemented feature-rich numerical algorithms (including MCMC, bootstrapping, advanced PDE solvers, root-finding for nonlinear equations) for optimal analysis and interpretation of astrophysical surveys

DEPARTMENT OF PHYSICS AND ASTRONOMY, UNIVERSITY OF CALIFORNIA Irvine, CA
Research Assistant and Teaching Assistant 07/06 – 06/09

- **Honors:** Invited by Dr. Adam Riess, Nobel Laureate in Physics (2011), to co-author a seminal paper with his team
- **Teamwork:** Successfully managed cross-functional international collaborations leading to multiple publications
- **Communication:** Guest speaker at global symposiums and esteemed universities, Winner of 'Best Talk' prize at the Annual Astrophysics Meeting (2008), Teaching Assistant for six courses including Senior Honors Physics
- **Flexibility:** Worked on a wide gamut of topics in the context of relativistic and cosmological model building
- **Data Mining:** Implemented variants of Principal Component Analysis (PCA) to large multivariate datasets
- **Creativity:** Developed a unique non-parametric cosmological data analysis package (<http://dsarkar.org/code.html>)

ADDITIONAL INFORMATION

- Creator and moderator of stocks and options trading blog: <http://optionsmojo.com>
- Inducted to Sigma-Xi, Phi Beta Delta, Phi Kappa Phi, Sigma Pi Sigma
- President of Cultural India Club (2004-05); Other Interests: Yoga, Chess, Ping-Pong, Cricket, Traveling, Hiking