Professor Ali Hirsa joined IEOR in July 2017. He has been associated with Columbia University as an Adjunct Professor since 2000. He is also Managing Partner at Sauma Capital, LLC and Senior Advisor at DV Trading, LLC where he was Managing Director and Global Head of Quantitative Strategy.

Previously he was a Partner and Head of Analytical Trading Strategy at Caspian Capital Management, LLC. Prior to joining Caspian, Ali worked in a variety of quantitative positions at Morgan Stanley, Banc of America Securities, and Prudential Securities. Ali was also a Fellow at Courant Institute of New York University in the Mathematics of Finance Program from 2004 to 2014.

Ali's research interests are algorithmic trading, machine learning, data mining, computational/quantitative finance and optimization. His focus has been on developing learning algorithms on signal extraction from data.

Ali is author of "*Computational Methods in Finance*", Chapman & Hall/CRC 2012 and co-author of "*An Introduction to Mathematics of Financial Derivatives*", third edition, Academic Press and is the editor of Journal of Investment Strategies. He has several publications and is a frequent speaker at academic and practitioner conferences.

Ali is co-inventor of "*Methods for Post Trade Allocation*" (US Patent 8,799,146). The method focuses on allocation of filled orders (post-trade) on any security to multiple managed accounts which has to be fair and unbiased. Current existing methods lead to biases and the invention provides a solution to this problem.

He is on Board of Visitors of College of Computer, Mathematical, and Natural Sciences and A. James Clark School of Engineering at University of Maryland College Park and he served as a trustee on University of Maryland College Park Foundation from 2011 to 2016.

Ali received his PhD in Applied Mathematics from University of Maryland at College Park under the supervision of Professors Howard C. Elman and Dilip B. Madan.

Research Interests:

Finance/Financial Engineering
Machine Learning
Optimization
Stochastic Systems