Hari Bandi

Contact Information

Operations Research Center
Massachusetts Institute of Technology
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Education

Massachusetts Institute of Technology, Cambridge MA — **Sept 2016 – present**

Candidate for PhD in Operations Research

Advisor: Dimitris Bertsimas.

Indian Institute of Technology Kharagpur, India — **August 2011 – May 2016**

Integrated Masters in Mathematics and Computer Science with a minor in Economics.
GPA 3.59/4.0

Scholastic Achievements

Honorable mention in INFORMS **Undergraduate OR prize** competition.

Awarded **Institute Silver medal** at IIT Kharagpur for securing the highest GPA among the graduating class.

Prof. J.C. Ghosh Memorial prize for securing highest Cumulative GPA in the class at the end of 6^{th} semester.

KVPY Fellowship (Kishore Vaigyanik Protsahan Yojna) award from Department of Science and Technology ,Government of India for the year 2011-2016 to pursue undergraduate studies (Stream SB).

KVPY Fellowship (Kishore Vaigyanik Protsahan Yojna) award from Department of Science and Technology, Government of India for the year 2010-2011 (Stream SX).

INSPIRE Scholarship (Innovation in Science Pursuit for Inspired Research) award from Department of Science and Technology, Govt. of India 2011-2016 (Declined).

Work Experience

IBM T.J Watson Research Center, NY

Research intern, Business Analytics and Mathematical Sciences — **Summer 2016**

Worked on a dynamic pricing problem for American Airlines using demand forecasting and consumer choice models.

Columbia University, NY

Intern, Industrial Engineering and Operations Research — **Summer 2015**

Worked on developing novel fast algorithms for solving robust regression problems by leveraging connections with regularized linear regression problems.

Google, Hyderabad, India

Intern, Google AI — **Summer 2014**

Worked on modeling natural language by understanding how conversations move from topic to topic and how dialog acts play a crucial role in predicting the structure of next utterance in a conversation.

Teaching Experience

Massachusetts Institute of Technology, Cambridge, MA — **Spring 2019**
Teaching Assistant for the course: Analytics Edge (Master of Business Analytics Core)

Massachusetts Institute of Technology, Cambridge, MA — **Fall 2017**
Teaching Assistant for the course: Data, Models and Decisions (MBA Core)

Massachusetts Institute of Technology, Cambridge, MA — **Spring 2016**
Teaching Assistant for Analytics Capstone Project (Master of Business Analytics Core)

Publications

"*Learning a Mixture of Gaussians via Mixed Integer Optimization*", with D. Bertsimas and R. Mazumder, INFORMS Journal on Optimization, 2018.

"*Robust Learning of Multivariate Gaussians and Mixtures: A Computational Discrete Optimization Approach*", with R. Mazumder, under review.

"*Function Estimation Under Smoothness and Shape Constraints*", R. Mazumder, submitted.

"*Statistical Hypothesis Testing via Robust Optimization*", D. Bertsimas and R. Mazumder, submitted.

"*Optimizing Influenza Vaccine Composition: A Machine Learning Approach*", D. Bertsimas, submitted.

"*Regularized Linear Regression via Robust Optimization Lens*", V. Goyal and G. Iyengar, working paper.

Technical Skills

Languages: C/C++, Python, Julia and SQL.
Scientific Computing: R, IPython, Matlab.
Technologies: TensorFlow, Map-Reduce, Borg, Wordpress and Django.