Hari Bandi

Contact Information Operations Research Center

Massachusetts Institute of Technology 77 Massachusetts Avenue, E40-130

Cambridge, MA 02139

550 Memorial Drive, Apt 23C

Cambridge, MA 02139 Phone: (617) 372-3894

Email: hbandi@mit.edu

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 $\label{lem:honorable} \mbox{Honorable mention in INFORMS } \mbox{\bf Undergraduate } \mbox{\bf OR prize competition}.$

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 Nference Inc, Cambridge, MA

Research Scientist

Summer 2020

Working on multiple projects related to COVID-19 pandemic.

IBM T.J Watson Research Center, New York, 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, New York, 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 Teaching Assistant for the course: Analytics Edge (MBA Core) Spring 2020

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

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

"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.

"An Algorithmic Perspective on Regression Function Estimation with Smoothness and Shape Constraints", R. Mazumder, submitted.

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