



University of Houston
SIAM Student Chapter
Department of Mathematics

Data Science at Monsanto: Turning Data into Food and Forecasting Sales to Drive Decisions

Manisha Bhardwaj

Friday, December 2, 2016
2:00pm - 3:00 pm
SEC 201

Abstract

Data driven solutions are transforming every industry and impacting business decisions. This has led to an evolution from decisions backed by intuition and experience to being driven by data and patterns. The Global IT Analytics team at Monsanto is utilizing predictive, geospatial, and optimization modeling to guide decisions for production of higher quality seeds and traits. This talk will provide an overview of mathematical and statistical solutions for a variety of industry scale research problems at Monsanto. We will focus on a business case for sales forecasting and show the use of predictive modeling techniques from basic regression to ensemble methods. The resulting models have been deployed in production as an end-to-end digital application with automated data ingestion and execution in an elastic computing environment for an enterprise use. We will also discuss internships and full-time opportunities at Monsanto.

Manisha Bhardwaj is a Data Science Technical Lead in Global IT Analytics team at Monsanto. In her 3 years at Monsanto, she has worked on development and deployment of several mathematical and statistical models for R&D and Global Supply Chain organizations. She is working with scientists to develop digital products leveraging cutting-edge research and technology platforms to revolutionize global agriculture. Manisha received her Ph.D. and M.S. in Mathematics from University of Houston and B.S. from St. Stephens College in Delhi, India. Her research interests include Bayesian modeling, machine learning, geospatial and big data analytics.

Food and drinks will be served at 1:45 pm!
More info at www.math.uh.edu/uhsiam