

# COMPUTATIONAL MODELING AND DATA ANALYTICS INSIGHTS FROM INDUSTRY LECTURE



3M  
NITSAN BEN-GAL

## MATHEMATICS AT A 'MATERIALS COMPANY': HOW 3M CREATES ADVANCED TECHNOLOGIES

*3M is a global innovation company developing products and solutions for the Industrial, Health Care, Safety, Graphics, Electronics, Energy, and Consumer sectors. While famous for its materials and processing capabilities, 3M's Software, Electronic & Mechanical Systems Laboratory (SEMS) works with all areas of the company to develop innovative products and solutions utilizing Mathematical, Computer Science, and Engineering expertise.*

*In this talk I will give an overview of some technologies in development or recently deployed within the Advanced Technologies Group that utilize its mathematical and computational expertise, and how these interplay with 3M's established businesses. I will also discuss my own experience as a mathematician both on the job market and at 3M.*

Nitsan Ben-Gal is a Data Scientist in the 3M Corporate Research Laboratory, where she works on problems involving machine learning, predictive analytics, and computer vision. Prior to joining 3M, she completed a postdoc at the Institute for Mathematics and its Applications and the Weizmann Institute of Science. She holds a Ph.D. in Applied Mathematics from Brown University (2010).

**FRIDAY • 26 FEBRUARY • 4:00-5:00 PM • TORGENSEN 3100**