

## Applications of Predictive Analytics & Systems Modeling

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**Abstract:** In this talk, I'll summarize the methodologies and applications of analytical methods being used in recent research: hierarchical modeling to predict yield by using Poisson and multinomial logistic regression, stochastic methods in lung cancer screening, reliability and system methods in obsolescence forecasting, analytical methods in healthcare projects, Bayesian methods in reliability monitoring and systems modeling of the food system.

**Bio:** *Christina Mastrangelo* is an Associate Professor of Industrial & Systems Engineering at UW. She holds BS, MS and Ph.D. degrees in Industrial Engineering from Arizona State University. Prior to joining UW in 2002, she was an Associate Professor of Systems and Information Engineering at the University of Virginia. Dr. Mastrangelo has several years of industrial manufacturing experience at AlliedSignal Aerospace and Honeywell IACD.

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