Abstract

Optimization in the presence of uncertainty makes use of many things, among them are high performance computing, data analysis, evaluation of stochastic outcome descriptions, and validation in a realistic stochastic environment. Given that most practitioners do not have probability distributions readily available for use, the entire process needs to rely on data and perhaps on forecasts. In this talk, I will describe ongoing research concerning optimization under uncertainty that is implemented in the open source PySP package as part of Pyomo (www.pyomo.org). Applications to energy planning with renewables as well as forest harvesting in the presence of fire will be used to illustrate the ideas along with some examples from the literature.
About the Speaker

David L. Woodruff holds B.S. and M.S. degrees from Stanford and a Ph.D. from Northwestern University, all in Industrial Engineering. He is Professor in the University of California Davis Graduate School of Management, where he has been for 25 years. He is currently Editor-in-Chief of the INFORMS Journal on Computing. His research concerns optimization under uncertainty and stochastic process modelling to support it. He has worked on applications in Energy, Supply Chain Planning, and Forest Harvest in the presence of fire risk, among other areas.

Enquiry: 3442 8408

All are Welcome!

SEEM Seminar 2017-2018/029