

# **ASME Utah Presents**

# Surviving the Data Explosion: Tools for Big Data

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## Friday, February 8<sup>th</sup>, 1:00 - 2:00 pm Warnock Engineering Bldg. (WEB) 1230



### Abstract:

Large datasets are becoming ubiquitous, along with unprecedented opportunities for research and development. New tools for analyzing such datasets are constantly being introduced by computer scientists, electrical engineers and statisticians, among others. The parallel development of methods in these disciplines, along with different terminology and subtly different purposes, makes these tools particularly challenging to use, especially for people from fields that have not traditionally needed sophisticated data analysis. Faced with a bewildering array of methodology and software, it can be difficult to even know where to start.

In this nontechnical talk, I will introduce some of the most popular tools in the context of the sorts of problems for which they are most useful. Strengths and weaknesses of the various methods will be discussed. The talk is introductory, aimed at a general audience.

#### Bio:

Dr. Adele Cutler is a Professor in the Department of Mathematics and Statistics at Utah State University. She earned a BSc (Hons) degree in Mathematics and Statistics from the University of Auckland in 1982 and a PhD in Statistics from UC Berkeley in 1988. Her PhD advisor was the statistical luminary Leo Breiman, whose groundbreaking work included Classification and Regression Trees, Bagging and Random Forests. Breiman and Cutler co-authored the original Random Forests code which forms the foundation of open source Random Forests software. Dr. Cutler's current research continues and extends Breiman's work on Random Forests and their applications.

### All are welcome

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