Innovative Applications in Analytics Award

Announcing the 2012-2013 Winners of the Innovative Applications in Analytics Award!

Michael Gorman, University of Dayton
Chair, IAAA

The winners for the Innovative Applications in Analytics Award were named at the Spring Analytics Conference in San Antonio. Chosen from a competitive list of 40 submissions and 10 semifinalists, the top three faced stiff competition. Their work in utilities, medicine and insurance are certainly fantastic examples of innovative application and integration of a variety of analytical techniques, including machine learning, text recognition, data envelopment analysis, logistic regression, forecasting and simulation. Importantly, all are examples of diverse analytical techniques making a difference in organizations.

The award criteria values innovating application, and integration of a range of analytics techniques.

For those interested in participating in the next competition, the 2013-2014 process has begun.

2013 Winner(s): Cynthia Rudin, Massachusetts Institute of Technology;
Seyda Ertekin, Massachusetts Institute of Technology;
Rebecca Passonneau, Axinia Radeva, Ashish Tomar, Boyi Xie, Columbia University;
Stanley Lewis, Mark Riddle, Debbie Pangsrivinij, John Shipman, Steve Ierome and Delfina Isaac, Con Edison Company of New York ; **Cynthia Rudin**, Massachusetts Institute of Technology

Winning material: Analytics for Power Grid Distribution Reliability in New York City

Citation: We summarize the first major effort to use analytics for preemptive maintenance and repair of an electrical distribution network. This is a large-scale multi-year effort between scientists and students at Columbia and MIT and engineers from Con Edison, which operates the world's oldest and largest underground electrical system. Con Edison's preemptive maintenance programs are less than a decade old, and are made more effective with the use of analytics developing alongside the maintenance programs themselves. Some of the data used for our projects are historical records dating as far back as the 1880's, and some of the data are free text documents typed by dispatchers. The operational goals of this work are to assist with Con Edison's preemptive inspection and repair program, and its vented cover replacement program. This has acontinuing impact on public safety, operating costs, and reliability of electrical service in New York City. [hide more]