ABSTRACT
Shopping can be decomposed into three basic questions: what, where, and when to buy? In this talk, I’ll describe how we utilize advanced data-mining and text-mining techniques at Decide.com (and earlier at Farecast) to solve these problems for on-line shoppers. Our algorithms have predicted prices utilizing billions of data points, and ranked products based on millions of reviews.

Categories and Subject Descriptors
H.3.5 [Information Storage and Retrieval]: Web-based services; Commercial services.

General Terms
Algorithms, Performance

Keywords
Data Mining; Retail Products

Bio
Oren Etzioni received his PhD from Carnegie Mellon in 1991. He is the WRF Entrepreneurship Professor of Computer Science at the University of Washington. Oren is the author of over 200 technical papers, cited over 18,000 times. He received the NSF Young Investigator Award in 1993, and was selected as a AAAI Fellow a decade later. In 2007, he received the Robert S. Engelmore Memorial Award for “long-standing technical and entrepreneurial contributions to Artificial Intelligence”. Oren is the founder of three companies focused on increased transparency for shoppers. His first company, Netbot, was the first online comparison shopping company (acquired by Excite in 1997). His second company, Farecast, advised travelers when to buy their air tickets. Farecast was acquired by Microsoft in 2008 and became the foundation for Bing Travel. Decide.com, founded in 2010, utilizes cutting-edge data-mining methods to minimize buyer’s remorse. In 2013, Oren was chosen as the “Geek of the Year” by a vote of the Seattle Tech Community.