NYU Stern School of Business
Department of Information, Operations & Management Sciences
OPERATIONS MANAGEMENT RESEARCH SEMINAR

TOPIC: **Deals or No Deals: Contract Design for Online Advertising**
SPEAKER: **Hamid Nazerzadeh (USC)**
DATE: **Wednesday, January 27, 2016**
TIME: **11:00 AM-12:00PM**
PLACE: **KMC 3-60**

ABSTRACT

Billions of dollars worth of display advertising are sold via contracts and deals. This paper is the first formal study of preferred deals, a new generation of contracts for selling online advertisement that generalize the traditional reservation contracts; these contracts are suitable for advertisers with advanced targeting capabilities. We propose an approximation algorithm for maximizing the revenue that can be obtained from these deals. We evaluate our algorithm using data from Google's ad exchange platform. Our algorithm obtains about 90% of the optimal revenue. Furthermore, we show, both theoretically and via data analysis, that deals, with appropriately chosen minimum-purchase guarantees, can yield significantly higher revenue than auctions.

Joint work with Vahab Mirrokni (Google).

BIO

Hamid Nazerzadeh is an assistant professor in the Data Sciences and Operations department at USC Marshall School of Business. He obtained his Ph.D. in Operations Research from Stanford University and his B.Sc. from Sharif University of Technology and has worked at Microsoft, Yahoo!, and Google research labs. His research focuses on mechanism design and optimization algorithms and their applications in operations and monetization of online markets. He is the recipient of Yahoo! Ph.D. Student Fellowship Award (2007), Honorable Mention in George Dantzig Dissertation Awards (2009), Google Faculty Research Award (2013), Marshall Dean's Award for Research Excellence (2014), and INFORMS Revenue Management and Pricing Section Prize (2014).