

# Eighth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR 2012)

McGill University  
Desautels Faculty of Management  
1001 Sherbrooke W.  
Montreal, Canada

June 28<sup>th</sup> - June 29<sup>th</sup>, 2012  
Website: <http://www.scecr.org/>

\*\*NOTE: THE FINAL PRESENTER IN EACH SESSION SHOULD SERVE AS THE SESSION CHAIR\*\*  
\*\*ALL SESSIONS WILL BE HELD IN THE BRONFMAN BUILDING AT THE ADDRESS ABOVE\*\*

\*\* Presentations should be between 20 and 25 minutes (20 minutes for Session 2 on Friday). \*\*

## Thursday, June 28<sup>th</sup>

**Breakfast and Opening Remarks: (8:15–9:00 AM) – 2<sup>nd</sup> Floor Lounge**

### Session 1: (9:00–10:30 AM)

Group A: Room 210	Group B: Room 245
<ul style="list-style-type: none"> <li>• <b>Analyzing IT Multisourcing: The Coordination Challenge:</b> Shweta Singh, Ravi Bapna, Alok Gupta, Gautam Ray (<i>University of Minnesota</i>)</li> <li>• <b>All E-Business is Not Alike: E-Buying and other Inter-Organizational Business Process Innovation:</b> Kristina McElheran (<i>Harvard Business School</i>), T. Lynn Riggs (<i>U.S. Commodities Futures Trading Commission</i>)</li> <li>• <b>On Identity and Financial Inclusion: Is there a Case for India’s UID Project?:</b> Ravi Bapna (<i>University of Minnesota</i>), Tingting Nian, Arun Sundararajan (<i>New York University</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Network Structure, Market Dynamics and Tie Formation in IT Outsourcing:</b> Yingda Lu (<i>Carnegie Mellon University</i>), Anjana Susarla (<i>Michigan State University</i>), Kiron Ravindran (<i>IE Business School</i>), Vijay Gurbaxani (<i>University of California Irvine</i>)</li> <li>• <b>Bricks, Clicks, Blockbusters, and Long Tails: How Video Rental Patterns Change as Consumers Move Online?:</b> Alejandro Zentner (<i>University of Texas at Dallas, Carnegie Mellon University</i>), Michael D. Smith (<i>Carnegie Mellon University</i>), Cuneyd Kaya (<i>University of Texas at Dallas</i>)</li> <li>• <b>How Buyers Transition Between Physical and Electronic Channels: A Longitudinal Analysis:</b> Eric Overby (<i>Georgia Institute of Technology</i>), Sam Ransbotham (<i>Boston College</i>)</li> </ul>

**Break: (10:30–11:00 AM) – 2<sup>nd</sup> Floor Lounge**

**Session 2: (11:00–12:30 PM)**

Group A: Room 210	Group B: Room 245
<ul style="list-style-type: none"><li>• <b>Real-time Effects of Twitter Activity on the Price and Trading Volume of Individual Stocks:</b> Ali Tafti, Ryan Zotti (<i>University of Illinois</i>)</li><li>• <b>Information Unraveling in Online Micro Contracting: Evidence from Natural Experiments:</b> Paulo Goes, Mingfeng Lin (<i>University of Arizona</i>)</li><li>• <b>Using Randomization Methods to Identify Social Influence in Mobile Networks:</b> Rodrigo Belo, Pedro Ferreira (<i>Carnegie Mellon University</i>)</li></ul>	<ul style="list-style-type: none"><li>• <b>An Empirical Analysis of Digital Visibility:</b> Lauren Rhue, Arun Sundararajan (<i>New York University</i>)</li><li>• <b>The Impact of Strength of Tie and Social Embeddedness on Influence in Social Networks: Evidence from a Randomized Experiment:</b> Sinan Aral, Dylan Walker (<i>New York University</i>)</li><li>• <b>Internet’s Dirty Secret: Assessing the Impact of Technology Shocks on the Outbreaks of Sexually Transmitted Diseases:</b> Jason Chan (<i>New York University</i>), Anindya Ghose (<i>New York University</i>)</li></ul>

**Lunch: (12:30–2:00 PM) – 6<sup>th</sup> Floor Executive Lounge**

**Keynote Address: (1:00PM) – Sponsored by INFORMS Information Systems Society**

**Brian Whitman, Co-Founder and CTO, echonest**  
**“What Computers Talk About When They Talk About Music”**

It's great that computers can make sense of music these days – over 200 million people now trust an algorithm they've never met to listen to and discover music. It's also pretty scary: music needs a bit more care than collaborative filtering or automated editorial approaches can give, and before we let Google make mixtapes for our crushes, we should step back and see what the potential of music analysis is and how we can give it more respect.

For the past 10 years I've been working on music analysis, first academically and now as the co-founder and CTO of the Echo Nest, a company you've never heard of but powers most music experiences you have on the internet today, from Spotify to Clear Channel to MTV. I'll show how the interaction between listeners and music is being modeled today, where it is amazing and where it falls flat, and more recently how new industries are taking advantage of the platonic "musical taste profile."

### Session 3: (2:00–3:30 PM)

Group A: Room 210	Group B: Room 245
<ul style="list-style-type: none"><li>• <b>Mobile Advertising and App Adoption in the New Mobile Economy:</b> Anindya Ghose (<i>New York University</i>), Sang Pil Han (<i>City University of Hong Kong</i>)</li><li>• <b>Location-Based Services and their impact on Local Businesses: Evidence from Foursquare:</b> Lei Wang, Ram Gopal, Ramesh Sankaranarayanan, Joseph Pancras (<i>University of Connecticut</i>)</li><li>• <b>Predicting User Behavior in Social Media:</b> Prem Swaroop, Shanchan Wu, Leanna Gong, Yogesh Joshi, William Rand, Louiqa Raschid (<i>University of Maryland</i>)</li></ul>	<ul style="list-style-type: none"><li>• <b>Peer Influence, Competition and Content Creation in Social Media Platforms:</b> Bin Zhang, Anjana Susarla (<i>Michigan State University</i>), Ramayya Krishnan (<i>Carnegie Mellon University</i>)</li><li>• <b>Attention Allocation in Information-Rich Environments: The Case of News Aggregators:</b> Chrysanthos Dellarocas (<i>Boston University</i>), Elia Palme, Mihai Calin, Juliana Sutanto (<i>ETH Zurich</i>)</li><li>• <b>Social TV: Linking TV Programming to Social Media Buzz, Network Growth and Sales in Real Time:</b> Shawndra Hill, Adrian Benton, Jing Peng (<i>University of Pennsylvania</i>)</li></ul>

### Break: (3:30–4:00 PM) – 2<sup>nd</sup> Floor Lounge

### Panel Discussion: (4:00–5:15 PM) – Room 210

- Ethical Issues with Big Data Research and Digital Experiments

### Interactive Presentations: (5:15–7:00 PM) – 2<sup>nd</sup> Floor Lounge

“Slam-Style” Presentations: 5:15-6:00PM; Poster Display & Discussions: 6:15PM – 7:00PM  
Session Chair: Ravi Bapna, *University of Minnesota*

- **Online User Reviews and the Evolution of Perceived Quality:** Peter Lenk (*University of Michigan*), Kirthi Kalyanam (*Santa Clara University*), Arvind Rangaswamy (*Pennsylvania State University*)
- **Rewards and User Behavior in Crowd-based Problem Solving:** Paulo Goes, Chenhui Guo, Mingfeng Lin (*University of Arizona*)
- **Quantifying Growth and Product Assortment Decisions Across Multiple Retail Stores: Combining Data Analytics and Optimization to Connect Global Patterns with Local Constraints:** Xue Bai, Sudip Bhattacharjee, Fidan Boylu, Ram Gopal (*University of Connecticut*)
- **Product Market Competition and Corporate Venture Capital Investments: Evidence from the U.S. IT Industry:** Keongtae Kim, Anandasivam Gopal, Gerard Hoberg (*University of Maryland*)
- **The Value of Friendship Ties in Online Peer-to-Peer Lending:** De Liu, Pei Xu (*University of Kentucky*), Yong Lu (*Pennsylvania State University*), Zhexiang Sheng (*University of Illinois at Urbana-Champaign*)

- **Overt Management Participation in Consumer Forums: A Pre-Crisis Strategy in the Online Environment:** Stacey-ann Sharpe, Dongling Huang, Thiagarajan Ravichandran (*Rensselaer Polytechnic Institute*)
- **Tree Matching Solution for Self-Selection in Impact Surveys:** Reema Gupta, Deepa Mani, Galit Shmueli (*Indian School of Business*), Sunil Mithas (*University of Maryland*)
- **A parsimonious methodology for recommendation systems on datasets with minimal attributes and large time span:** Dmitry Zhdanov, Sudip Bhattacharjee, Mikhail Bragin (*University of Connecticut*)
- **Autonomous Data-Driven Decision-Making in Smart Electricity Markets:** Markus Peters, Wolfgang Ketter (*Erasmus University*), Maytal Saar-Tsechansky (*University of Texas at Austin*), John Collins (*University of Minnesota*)
- **The Value of Information From Price Comparison Sites:** Clint Pennings, Niels Agatz, Ting Li, Otto Koppius (*Erasmus University*)
- **Impact of Self Service Knowledge Repository Use by Callers on the Productivity of Technical Support Engineers:** Mani Subramani, Mihir Wagle, Gautam Ray (*University of Minnesota*), Vallabh Sambamurthy (*Michigan State University*)
- **The Impact of Information Networks on Productivity:** Jacomo Corbo (*University of Ottawa*), Gary P. Pisano (*Harvard University*)
- **Constructing and operating a large-scale simulation of retail electric power markets:** John Collins (*University of Minnesota*), Wolfgang Ketter, Konstantina Valogianni (*Erasmus University*), Mathijs De Weerd (*Delft University of Technology*)
- **Quality-Adjusted Consumer Surplus for Markets with Asymmetric Information: A study of online marketplace for outsourcing of IT Services:** Yili Hong, Paul Pavlou, Pei-yu Chen (*Temple University*)
- **A Cluster-based Method for Isolating Influence:** Shawndra Hill, Adrian Benton, Lyle Ungar, Annie Chung, John H. Holmes (*University of Pennsylvania*), Sofus Macskassy (*Information Sciences Institute*)

### Social Event: (5:15-7:00 PM) – 2<sup>nd</sup> Floor Lounge

- Un Cinq à Sept (pronounced “sank-ah-set”)

### Gala Dinner: (7:30 PM) – Bistro L’Aromate

- Le St-Martin Hotel, 980 de Maisonneuve West, Montreal

## Friday, June 29<sup>th</sup>

### Workshop Event: (8:30–9:30 AM) – Room 245

*Continental Breakfast provided for workshop participants starting at 8AM – 2<sup>nd</sup> floor lounge.*

- **Effective Data Visualization: A Hands-on Tutorial to the Path of Enlightenment**  
Presented by Galit Shmueli, Indian School of Business
- Sponsored by SOBACO@UMN
- Session Chair: Gordon Burtch, Temple University
- NOTE: This session is limited to 20 participants and is open to pre-registrants only. If you did not register for the workshop, you can still participate remotely by accessing our live stream at <http://bcooltv.mcgill.ca/Overflow/?RecorderID=46>

### Breakfast: (9:15–10:00 AM) – 2<sup>nd</sup> Floor Lounge

#### Session 1: (10:00–11:30 AM)

Group A: Room 210	Group B: Room 245
<ul style="list-style-type: none"><li>• <b>Estimating the Value of Online Communities by Analyzing User Participation Patterns:</b> Liron Sivan, Gal Oestreicher-Singer (<i>Tel Aviv University</i>), Barak Libai (<i>Interdisciplinary Center, Israel</i>)</li><li>• <b>The Value of Being Social: How Bloggers Attract Followers:</b> Hailiang Chen, Prabuddha De, Yu Jeffery Hu (<i>Purdue University</i>)</li><li>• <b>Me, My Online Friends, and My Job Search: An Empirical Analysis Measuring the Role of Online Social Connections:</b> Rajiv Garg, Rahul Telang (<i>Carnegie Mellon University</i>)</li></ul>	<ul style="list-style-type: none"><li>• <b>Testing Theories with Big Data: A Super-Power Approach:</b> Galit Shmueli, Mohit Dayal, Bhimasankaram Pochiraju (<i>Indian School of Business</i>)</li><li>• <b>Statistical Challenges in Using Experimental Data to Analyze Consumer Trust and Effectiveness of Assurances in Ecommerce Across Different National Markets:</b> Eric Clemons, Fujie Jin, Josh Wilson (<i>University of Pennsylvania</i>), Fei Ren (<i>Peking University</i>), Thomas Hess, Christian Matt (<i>Ludwig-Maximilians Universität München</i>), Noi Sian Koh (<i>Singapore Management University</i>)</li><li>• <b>Country Clustering Based on Search-Query Pattern Correlation:</b> Edgar Anzaldúa Moreno, Riaz Esmailzadeh (<i>Carnegie Mellon University</i>)</li></ul>

### Break (11:30–11:45 AM) – 2<sup>nd</sup> Floor Lounge

## Session 2: (11:45AM –1:30 PM)

Group A: Room 210	Group B: Room 245
<ul style="list-style-type: none"><li>• <b>Peer Effects on the Adoption of the iPhone 3G:</b> Miguel Godinho de Matos, Pedro A. Ferreira, David Krackhardt (<i>Carnegie Mellon University</i>)</li><li>• <b>Predicting Demand Curves of Video-on-Demand Movies: A Functional Spatio-Temporal Approach:</b> Wolfgang Jank (<i>University of South Florida</i>), Bellur Srikar (<i>Avail – TVN</i>), Yue Tian (<i>University of Maryland</i>)</li><li>• <b>Free vs. For a Fee: The Impact of Information Pricing Strategy on Information Diffusion in Online Social Media:</b> Hyelim Oh, Animesh Animesh, Alain Pinsonneault (<i>McGill University</i>)</li><li>• <b>A Stochastic Model of Winning Bids in the Dutch Flower Auctions:</b> Yixin Lu, Wolfgang Ketter, Jan van Dalen, Eric van Heck (<i>Erasmus University</i>), Alok Gupta (<i>University of Minnesota</i>)</li></ul>	<ul style="list-style-type: none"><li>• <b>Implications of Online Product Review Variance for Product Categorization:</b> Yili Hong, Pei-yu Chen (<i>Temple University</i>), Lorin M. Hitt (<i>University of Pennsylvania</i>)</li><li>• <b>The Groupon Effect on Yelp Ratings: A Root Cause Analysis:</b> John Byers (<i>Boston University</i>), Michael Mitzenmacher (<i>Harvard University</i>), Georgios Zervas (<i>Yale University</i>)</li><li>• <b>Real-Time Social Media Response to TV Advertising:</b> Shawndra Hill (<i>University of Pennsylvania</i>), Aman Nalavade (<i>University of Pennsylvania</i>), Adrian Benton (<i>University of Pennsylvania</i>).</li><li>• <b>Probabilistic Hashing Methods for Fitting Massive Logistic Regressions and SVM with Billions of Variables:</b> Ping Li, Anshumali Shrivastava, Joshua Moore (<i>Cornell University</i>), Arnd Christian Konig (<i>Microsoft Corporation</i>).</li></ul>

## Gala Lunch (1:30–3:00 PM) – 6<sup>th</sup> Floor Executive Lounge

## End of Symposium – enjoy Montreal!

### SCECR 2012 thanks our generous sponsors:

- Business & Management Research Centre, Desautels Faculty of Management, McGill University
- SOBACO (Social Media and Business Analytics Collaborative) @ University of Minnesota
- INFORMS Information Systems Society
- MIS Quarterly, Carlson School of Management, University of Minnesota
- Notorious P.I.G.