Stevanovich Center
for Financial Mathematics
at the University Of Chicago

5727 South University Avenue
Conference Center (MS112)
Chicago, IL 60637
773-834-8563

October 3-5, 2019

Big Data and Machine Learning in Econometrics, Finance, and Statistics

Program

Scientific Organizing Committee: Frank Diebold, University of Pennsylvania, **Chao Gao**, University of Chicago, **Eric Ghysels,** University of North Carolina, **Roger Lee**, University of Chicago, **Per Mykland**, University of Chicago, **Niels Nygaard,** University of Chicago, **Dacheng Xiu,** University of Chicago, **Lan Zhang,** University of Illinois at Chicago

This conference is jointly organized by the University of Chicago Stevanovich Center for Financial Mathematics, the University of North Carolina Rethinc.ML center and the University of Pennsylvania.

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Thursday, October 3, 2019

8:00 AM	Registration, light breakfast, and opening remarks		
9:00 AM	**Ming Yuan**	Columbia University	Information Based Complexity of High Dimensional Sparse Functions
9:50 AM	Break		
10:00 AM	**Peter Carr**	New York University	Using Machine Learning to Predict Realized Variance
10:50 AM	Break		
11:00 AM	**Kay Giesecke**	Stanford University	Towards Explainable AI: Significance Tests for Neural Networks
11:50 AM	Lunch break		
130 PM	**Tracy Ke**	Harvard University	Optimal Adaptivity of Network Global Testing
2:20 PM	Break		
2:30 PM	**Jiashun Jin**	Carnegie Mellon University	Co-authorship and Citation Networks of Statisticians
3:20 PM	Break		
3:30 PM	**Bryan Kelly**	Yale School of Management	The Structure of Economic News
4:20 PM	Break		
4:30 AM	**Francis Diebold**	University of Pennsylvania	On the Evolution of U.S. Temperature Dynamics
5:20 PM	Day 1 concludes		

Friday, October 4, 2019

8:30 AM	Light breakfast - Registration continues		
9:00 AM	**Dacheng Xiu**	University of Chicago	Predicting Returns with Text Data
9:50 AM	Break		
10:00 AM	**Serena Ng**	Columbia University	Large Dimensional Factor Analysis with Missing Data
10:50 AM	Break		

11:00 AM	**Rina Foygel Barber**	University of Chicago	Predictive Inference with the Jackknife+
11:50 AM	Lunch break		
1:30 PM	**Robert McCulloch**	Arizona State University	Searching for Dusty Corners: Understanding the Prediction of the Cross Section of Returns
2:20 PM	Break		
2:30 PM	**Po-Ling Loh**	University of Wisconsin-Madison	Estimating location parameters in entangled single-sample distributions
3:20 PM	Break		
3:30 PM	**Richard Samworth**	University of Cambridge	High-Dimensional Principal Component Analysis with Heterogeneous Missingness
4:20 PM	Break		
4:30 PM	**Yi Yu**	University of Bristol	Dynamic Programming in Change Point Detection in High-Dimensional Autoregression Problems
5:30 PM	**Reception**		
6:30 PM	Day 2 concludes		

Saturday, October 5, 2019

8:30 AM	Light breakfast		
9:00 AM	**Hans Skaug**	University of Bergen	Integration by Differentiation; Almost a Free Lunch
9:50 AM	Break		
10:00 AM	**Allan Timmermann**	University of California San Diego	Do Any Economists Have Superior Forecasting Skills?
10:50 AM	Break		
11:00 AM	**Erwan Scornet**	Ecole Polytechnique	A Walk in Random Forests
11:50 AM	Lunch break		
1:00 PM	**Andrii Babii**	University of North Carolina at Chapel Hill	Machine Learning for Mixed Frequency Data
1:50 PM	Break		
2:00 PM	**Andrew Dai**	Google	Adversarial Methods for Language Understanding and Methods for Multi-modal Data
2:50 PM	Closing remarks - Conference concludes		