KDD 2016 Speakers

Computational Social Science: Exciting Progress and Future Challenges

Duncan Watts: Principal Researcher / Microsoft

Monday, August 15 - 10:00am to 12:00pm (Yosemite)

Applied Data Science Invited Talks

The past 15 years have witnessed a remarkable increase in both the scale and scope of social and behavioral data available to researchers, leading some to herald the emergence of a new field: "computational social science." Against these exciting developments stands a stubborn fact: that in spite of many thousands of published papers, there has been surprisingly little progress on the "big" questions that motivated the field in the first place—questions concerning systemic risk in financial systems, problem solving in complex organizations, and the dynamics of epidemics or social movements, among others. In this talk I highlight some examples of research that would not have been possible just a handful of years ago and that illustrate the promise of CSS. At the same time, they illustrate its limitations. I then conclude with some thoughts on how CSS can bridge the gap between its current state and its potential.

Speaker Bio

Duncan Watts is a principal researcher at Microsoft Research and an AD White Professor at Large at Cornell University. Prior to joining MSR in 2012, he was from 2000-2007 a professor of Sociology at Columbia University, and then a principal research scientist at Yahoo! Research, where he directed the Human Social Dynamics group.

Watts' research on social networks and collective dynamics has appeared in a wide range of journals, from Nature, Science, and Physical Review Letters to the American Journal of Sociology and Harvard Business Review, and has been recognized by the 2009 German Physical Society Young Scientist Award for Socio and Econophysics, the 2013 Lagrange-CRT Foundation Prize for Complexity Science, and the 2014 Everett Rogers Prize.

Watts is the author of three books: Six Degrees: The Science of a Connected Age (W.W. Norton, 2003); Small Worlds: The Dynamics of Networks between Order and Randomness (Princeton University Press, 1999); and most recently Everything is Obvious: Once You Know The Answer (Crown Business, 2011). He holds a B.Sc. in Physics from the Australian Defence Force Academy, from which he also received his officer's commission in the Royal Australian Navy, and a Ph.D. in Theoretical and Applied Mechanics from Cornell University.

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