

MANAGEMENT SCIENCES SEMINAR SERIES

Understanding Success in Science and Technology

Professor Dashun Wang
Northwestern University

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10:30am-11:30am
W401 Pappajohn Business Building

ABSTRACT

Our current approach to success is driven by the belief that predicting exceptional impact requires us to detect extraordinary ability. Despite the long-standing interest in the problem, even experts remain notoriously bad at predicting long-term impact. Success reveals predictable patterns, however, if we start to see it not as an individual but a collective phenomenon: for something to be successful, it is not enough to be novel or appealing, but we all must agree that it is worthy of praise. If we accept the collective nature of success, its signatures can be uncovered from the many pieces of data around us using the tools of network and data sciences. In this talk, I will touch on several different examples of success spanning across science and technology, hoping to illustrate a series of fundamental mechanisms governing success. The uncovered patterns in these studies not only document new degrees of regularities underlying the often noisy and unpredictable complex systems, they also offer reliable measures of influence that may hold direct policy implications.

About the speaker: Dashun Wang is an Associate Professor of Management and Organizations at the Kellogg School of Management, Northwestern University, where he directs the Social Complexity group. He is also a core faculty at the Northwestern Institute on Complex Systems (NICO) and an affiliated faculty of Industrial Engineering & Management Sciences at the McCormick School of Engineering. Prior to joining Northwestern, he was an Assistant Professor of Information Sciences and Technology at the Pennsylvania State University and before that, a Research Staff Member at the IBM T.J. Watson Research Center. His research has been published in such general audience journals as *Science*, and *PNAS* as well as top specialized venues in computer science and physics, and has been featured in the *New York Times*, *Forbes*, the *Economist*, the *Guardian*, the *Washington Post*, the *Boston Globe*, among other major global media outlets. He is a recipient of the AFOSR Young investigator award (2016).