

# Seventh International Workshop on Network Theory: Peer Production Networks

October 29-31, 2015

**Northwestern University**  
Scott Hall, Guild Lounge  
601 University Pl  
Evanston, Illinois  
[http://bit.ly/ANN\\_SONIC\\_2015](http://bit.ly/ANN_SONIC_2015)  
Twitter hash tag: #peerprodnet

# Welcome!

...to the Seventh International Workshop on Network Theory: Peer Production Networks The workshop is organized by the Science of Networks in Communities (SONIC) Research Group, in collaboration with the Annenberg Networks Network (ANN) at the University of Southern California, the Northwestern Institute on Complex Systems (NICO), and the Developing Effective Leaders, Teams, and Alliances (DELTA) Lab at Georgia Institute of Technology.

Past workshops include...

First International Workshop on Network Theory: Interdisciplinary Approaches to Social Network Theory, September 15–16, 2006, Annenberg Center for Communication, University of Southern California, Los Angeles

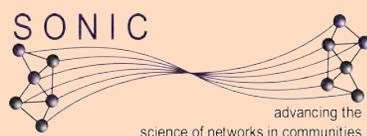
Second International Workshop on Network Theory: Network Multidimensionality in the Digital Age, February 19–20, 2010, Annenberg Research Park, University of Southern California, Los Angeles

Third International Workshop on Network Theory: Web Science Meets Network Science, March 4-6, 2011, James L. Allen Center, Northwestern University, Evanston

Fourth International Workshop on Network Theory: Networked Social Movements and Network Theory, April 26-28, 2012, Annenberg Research Park, University of Southern California, Los Angeles

Fifth International Workshop on Network Theory: Network Science Meets the Science of Teams, Oct 3-5, 2013, Wiebolt Hall, Northwestern University, Chicago

Sixth International Workshop on Network Theory: Social Networks in Governmental and Nongovernmental Sectors, April 10-12, 2014, Annenberg Research Park, University of Southern California, Los Angeles



# Schedule

## Thursday, October 29

5:00 pm – 8:00 pm

**Registration and Reception**  
Hilton Orrington, Hinman Foyer

## Friday, October 30

8:00 am – 9:00 am

**Breakfast**  
Scott Hall, Guild Lounge

9:00 am – 9:15 am

**Welcome Remarks**  
*Dean Barbara O'Keefe, School of Communication*  
*Dean Julio Ottino, McCormick School of Engineering & Applied Sciences*

9:15 am – 10:15 am

**Application of Networks: Analyzing knowledge construction**  
*Ulrike Cress, Leibniz-Institut für Wissensmedien*

10:15 am – 10:45 am

**Coffee Break**

10:45 am – 11:45 am

**Reuse Networks**  
*Jeff Nickerson, Stevens Institute of Technology*

11:45 am – 12:00 pm

**Welcome Remarks**  
*Dean Sally Blount, Kellogg School of Management*

12:00 pm – 1:15 pm

**Lunch**

1:15 pm – 2:15 pm

**Reflections on Open Source Software and Open Science Peer Production**  
*Charlie Schweik, University of Massachusetts, Amherst*

2:15 pm – 3:15 pm

**Reflections on Empirical Peer Production Research**  
*Aaron Shaw, Northwestern University*  
*Benjamin Mako Hill, University of Washington*

3:15 pm – 3:45 pm

**Snack**

3:45 pm – 4:15 pm

**Panel: Taking Stock & Charting Course I**  
*Leslie DeChurch, Georgia Institute of Technology*  
*Michael Macy, Cornell University*  
*Chris Riedl, Northeastern University*

4:45 pm – 5:00 pm

**Group Photo**  
Hilton Orrington, Northshore Dining Room

5:00 pm – 8:00 pm

**Dinner**  
Hilton Orrington, Northshore Dining Room

7:00 pm – 8:00 pm

**Keynote: Peer production, Commons, and the Future of Capitalism**  
*Yochai Benkler, Harvard University*

## Saturday, October 31

8:30 am – 9:30 am

**Breakfast**  
Scott Hall, Guild Lounge

9:30 am – 10:30 am

**Transparency and Open Collaboration Environments**  
*Laura Dabbish, Carnegie Mellon University*

10:30 am – 11:00 am

**Snack**

11:00 am – 12:00 pm

**Stages of Motivation for Virtual Voluntary Teams Online Engagement**  
*Kevin Crowston, Syracuse University*

12:00 pm – 12:15 pm

**Pick Up Lunch Boxes**

12:15 pm – 12:45 pm

**Panel: Taking Stock & Charting Course II**  
*Brian Bulter, University of Maryland*  
*Janet Fulk, University of Southern California*  
*Brian Keegan, Harvard Business School*

12:45 pm – 1:00 pm

**Closing Remarks**

1:00 pm

**Adjourn**

# Abstracts

## **Application of Networks: Analyzing Knowledge Construction**

**Ulrike Cress, Leibniz-Institut für Wissensmedien**

The presentation considers collaborative knowledge construction (e.g. as it happens in Wikipedia) under a systemic perspective: It considers individuals as cognitive systems and the community as a social system. Both systems are autopoietic and self-referential. Each one can irritate the other, which leads to a co-evolution of both systems. Individual learning and collaborative knowledge construction result from this co-evolution. The presentation first shows some highly controlled experimental studies that we have done in the lab to analyze these processes of learning and knowledge construction. Based on these it shows how we made use of network analyses to deal with the systemic and autopoietic processes of knowledge construction. In these studies we tried to analyze the conceptual development of Wikipedia content, the dynamic process of knowledge creation in and between different domains and the role of controversy in that process. The presentation poses, that network theory provides an excellent tool to analyze processes of knowledge construction under such a systemic perspective.

## **Reuse Networks**

**Jeff Nickerson, Stevens Institute of Technology**

Peer production is based on different forms of reuse. Open design collectives are heterogeneous, and there are interactions between the form of design representation and the attributes of designers. Theories of reuse can be tested on the persistent traces of these collectives. In an open design collective oriented toward additive manufacturing, the confluence of peer production and printing technology has led to a new form of mass customization that highlights issues of peer production platform design. These findings may be useful input to a more general theory of reuse that may apply to a wide range of peer production collectives.

## **Reflections on Open Source Software and Open Science Peer Production**

**Charles Schweik, Administration at the University of Massachusetts, Amherst.**

In this talk, Schweik will first present findings from a large-scale empirical study of the classic, “quintessential instance” (Benkler, 2006) of commons-based peer production, Open Source Software. In this study, published in his book “Internet Success: A Study of Open Source Commons” (MIT Press, 2012), Schweik and his team investigated factors that lead open source projects to either “success” -- ongoing collaboration -- or abandonment before their goals were achieved. Second, Schweik will reflect on his more recent ‘on the ground’ work understanding peer production in other domains such as in open geospatial technology research and education (GeoForAll.org) and open source hardware and science (the Public Laboratory of Open Technology and Science and the OpenROV communities). diversity, and learning.

## **Reflections on Empirical Peer Production Research**

**Aaron Shaw, Northwestern University**

**Mako Hill, University of Washington**

Early research into the organization of peer production networks described characteristics that differentiate successful peer production from traditional organizations. Recent research has sought to understand when peer production organizations are more and less effective as well as how features of communities change over time. Many of these studies have turned to large-scale comparative analysis and/or causal identification. In this talk, we highlight recent and ongoing research that is attempting to address these concerns. We focus on an in-progress study in which we combine large-scale comparison with observational causal identification in peer production wikis. Drawing on a panel of quasi-experiments, we empirically test the effect of requiring “cheap pseudonyms” on the quantity and quality of contributions

## **Keynote: Peer production, Commons, and the Future of Capitalism**

**Yochai Benkler, Harvard University**

Peer production has become a field of study in its own right, and has drawn scholarly attention from diverse disciplines using diverse methods. At its core, it is a mode of production based on decentralized organization, harnessing diverse intrinsic and social motivations, and separating governance and management from property and contract. As such, it offers social scientists a rich field for observation and experimentation in social motivations, social organization, and the innovation theory. While rich in its own right, it is important to understand that research on peer production is part of a broader debate on how we are to interpret the history of the past forty years in capitalism, and the potential futures of market-based societies. In particular, commons-based peer production, in combination with the Ostrom school institutional analysis and development of common property regimes, offer critiques of the three pillars of neoliberalism that have underwritten many of the discrete policies that drove the consistent rise of inequality in many market economies over the past four decades. In these schools, the same uncertainty and complexity that drove Hayek's insistence on market signals have been shown to require greater reliance on commons-based, context-specific knowledge, experimentation, and exploration rather than more abstracted, context-independent property bundles. The model of rationality that emphasizes self-interest with guile gave way to a model built on more diverse motivations and the consistent pressure of motivational non-separability, or crowding out. And the insistence on property has given way to evidence based claims of the necessary interrelationship between property and commons in advanced, innovation- and knowledge-based modern economies. Together, these are forming the foundation of an alternative understanding of capitalism and what it requires, as well as pointing to a new frontier of research on peer production—particularly how it can be more closely integrated into a market economy, perhaps through a new emphasis on peer cooperativism.

## **Transparency and Open Collaboration Environments**

**Laura Dabbsh, Carnegie Mellon University**

An emerging internet trend is greater social transparency, such as the use of real names in social networking sites, feeds of friends' activities, traces of others' re-use of content, and visualizations of team interactions. There is a potential for this transparency to radically improve collaboration and learning. In this talk, I will describe my research examining how social information influences collaborative performance in online work environments. Open collaboration environments often involve distributed workers who do not know one another personally and use traces of activity and interactions to inform their behavior. We are investigating how socially transparent interfaces influence perceptions and behavior with both positive and negative effects.

## **Stages of Motivation for Virtual Voluntary Teams**

### **Online Engagement**

**Kevin Crowston, Syracuse University**

Members of virtual voluntary teams engage in massive virtual collaborations (MVC), in which large numbers of mostly unpaid contributors collectively collaborate to create new content. Motivation for such contributions has been an active area of research. We argue that what was previously considered a single, static and individual phenomenon, namely motivation for contribution to MVC, is in fact at least three separate but interrelated phenomena, with varying organizational and dynamic aspects. Using the theory of helping behavior as a framework and integrating stage models, work motivation and social movement theory, we propose a conceptual framework that distinguishes three separate models of motivations of participants in Virtual Voluntary Teams. The models distinguish motivations for three stages of participation (initial, sustained and meta) and include as well propositions concerning the effects of contributions on individual states and emergent states of the project as a whole and vice versa. The models provide implications for both researchers and practitioners who manage MVC projects

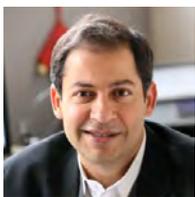
# Participants



**Yochai Benkler** is the Berkman Professor of Entrepreneurial Legal Studies at Harvard Law School, and faculty co-director of the Berkman Center for Internet and Society at Harvard University. Since the 1990s he has played a role in characterizing the role of information commons and decentralized collaboration to innovation, information production, and freedom in the networked economy and society. Benkler has advised governments and international organizations on innovation policy and telecommunications, and serves on the boards or advisory boards of several non-profits engaged in working towards an open society. His work can be freely access at [benkler.org](http://benkler.org).



**Brian Butler** is a professor and the interim Dean of the College of Information Studies at the University of Maryland. He joined the School in 2012 where he has been Director of the Master of Information Management (MIM) program and of the Center for the Advanced Study of Communities and Information (CASCI). His research focuses on developing theories and techniques that enable groups, communities and organizations to harness the full potential of new technologies. His current interests and prior work include: assessing the role of local information institutions in communities' capacity to adapt to environmental and economic change; techniques for mitigating the impact of politics on technology deployment in organizations; articulating principles for design of successful mass-collaboration systems; and developing methods for assessing the health of community-level information infrastructures.



**Noshir Contractor** is the Jane S. & William J. White Professor of Behavioral Sciences in the McCormick School of Engineering & Applied Science, the School of Communications and the Kellogg School of Management at Northwestern University. He is the Director of the Science of Networks in Communities (SONIC) research center. He is investigating factors that lead to the formation, maintenance, and

dissolution of dynamically linked social and knowledge networks in a wide variety of contexts. In 2014 he received the National Communication Association Distinguished Scholar Award recognizing a lifetime of scholarly achievement in the study of human communication. In 2015 he was elected as a Fellow of the International Communication Association



**Ulrike Cress** is a full professor at the University of Tuebingen and deputy director of the "Leibniz-Institut für Wissensmedien". She studied psychology at the University of Tuebingen (diploma 1993), achieved her Ph.D. in 2000 with a dissertation about self-regulated learning. In 2006 she got her *venia legendi* for psychology doing a work on the information-exchange dilemma. With her lab „knowledge construction“ she is doing research on learning with new media in formal settings as well as in informal settings. She is interested in knowledge management, and in the development and implementation of media-based learning scenarios. In particular she works on the social and cognitive processes of people constructing new knowledge. Much of her research aims to further develop the Co-Evolution Model of Individual Learning and Collaborative Knowledge Building, which she presented in 2008.



**Kevin Crowston** is a Distinguished Professor of Information Science in the School of Information Studies at Syracuse University. He received his Ph.D. (1991) in Information Technologies from the Sloan School of Management, Massachusetts Institute of Technology (MIT). His research examines new ways of organizing made possible by the extensive use of information and communications technology. Specific research topics include the development practices of Free/Libre Open Source Software teams and work practices and technology support for citizen science research projects, both with NSF support



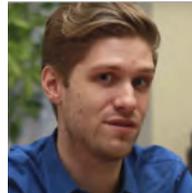
**Laura Dabbish** is an associate professor in the Human-Computer Interaction Institute in the School of Computer Science at Carnegie Mellon University, jointly appointed in the Heinz College of Public Policy, Information Systems and Management. Laura studies the design and use of communication technologies, with a focus on collaboration and new forms of work. Her research spans the fields of Human-Computer Interaction, Computer-Supported Cooperative Work, Information Systems and Organizational Behavior. She received her B.S. in Computer Science from the University of Southern California, and her M.S. and PhD from Carnegie Mellon as part of the first cohort to receive a PhD in the field of Human-Computer Interaction. Laura has spent time at Microsoft Research, studying communication technology usage, and Motorola, Inc., developing software for cellular technology infrastructure. She directs the Connected Experience Lab within the HCI Institute at CMU ([coexlab.com](http://coexlab.com)).



**Leslie DeChurch's** research is being used to improve teams engaged with scientific innovation, military-civil cooperation, humanitarian aid & disaster response, health care, and space exploration. Her research on complex forms of collaboration has been supported by more than \$8 Million in extramural funding from NSF, NASA, NIH, ARI, ARO, & ANR (France) including an NSF CAREER award to understand leadership in multiteam systems. She serves on multiple editorial boards, recently served on a National Academy of Science consensus study, and serves on the board of the Interdisciplinary Network or Group Research (INGRoup).



**Jeremy Foote** is a PhD student at Northwestern, studying Media, Technology, and Society. His research applies computational social science methods toward understanding the social implications of technology. He is interested in the seemingly altruistic behavior that appears online, such as open source software, product reviews, and wiki communities. Much of his work is focused on online communities: why people start communities, and what makes communities grow.



**Eric Forbush** is the lab manager of the Science of Networks in Communities (SONIC) research group at Northwestern University. He specializes in intercultural/international communication, network science, and the emerging field of computational social science. In particular, he uses a network lens to study issues related to cross-cultural adaptation and team composition/performance. His work has an interdisciplinary focus, utilizing a range of analytical techniques developed across a variety of backgrounds such as computer science, communication, engineering and sociology.



**Janet Fulk** is Professor of Communications in the Annenberg School for Communication and Journalism, and Professor of Management and Organization the Marshall School of Business at University of Southern California. Her research centers on social aspects of knowledge and distributed intelligence, enterprise social networking, nongovernmental organization networks, and dynamics of online communities. Current projects examine social dynamics in crowdsourcing creative communities, factors leading to post-funding success of crowd-funded projects, motivations and social capital in enterprise social networking, evolution of the social networking site as an organizational form, and the role of storytelling in entrepreneurial nonprofit organizations. She is a Fellow of The Academy of Management and of the International Communication Association, and she holds lifetime achievement awards from The Academy of Management.



**Darren Gergle** is a Professor in the Department of Communication Studies and the Department of Electrical Engineering and Computer Science (by courtesy) at Northwestern University. He serves as the Director of Graduate Studies for the Technology and Social Behavior joint PhD program in communication studies and computer science, and he is a co-chair of the faculty research council for the Segal Design Institute. He received his Ph.D. from the Human-Computer Interaction Institute in the School of Computer Science at

Carnegie Mellon University. His research incorporates human-computer interaction, social computing and computer-mediated communication. He focuses on applying cognitive and social psychological theories to the design, development and evaluation of novel collaboration and peer-production technologies. He has received two Best Paper awards and seven Best Paper Honorable Mention awards for his research, a National Science Foundation CAREER Award, and is a Kavli Fellow of the National Academy of Sciences.



**Ivan Hernandez, Ph.D.**, is a collaborative post-doctoral researcher in the SONIC lab at Northwestern University and the DELTA lab at the Georgia Institute of Technology. His research interests

include computational social science (agent-based modeling, text mining, spatial methods), language cognition (fluency, cultural differences), and group behavior (regional variation, social networks, multi-team systems).



**Jérôme Hergueux** is a post-doctoral researcher at the ETH Zurich and an affiliate researcher at the Berkman Center for Internet & Society at Harvard University. Prior to joining the ETH,

Jerome spent three years as a research fellow at the Berkman Center, where he did most of his Ph.D. work. Jerome is a behavioral economist interested in the interplay between psychology and economics. In his research, he couples experimental Jerome holds a Ph.D. in Economics from the University of Strasbourg and Sciences Po, Master's degrees in both International Economics and International Affairs from Sciences Po, and a B.A. in Economics & Finance from the University of Strasbourg. Jerome originates from the French region of Alsace. He has lived in France, Egypt, the U.S., Jordan and Switzerland. Jerome speaks French, English and Arabic and is heavily interested in political economy and international affairs.



**Benjamin Mako Hill** is an Assistant Professor in the University Of Washington Department Of Communication in Seattle. At UW, he is an Affiliate Faculty in the Center for

Statistics and the Social Sciences, the eScience Institute,

and the "Design Use Build" (DUB) group that supports research on human computer interaction. He is also currently a Faculty Affiliate at the Berkman Center for Internet and Society at Harvard University and an affiliate of the Institute of Quantitative Social Science at Harvard. He received his PhD from the Massachusetts Institute of Technology in an interdepartmental program involving the MIT Sloan School of Management and the MIT Media Lab.



**Yun Huang** is a research associate in the Science of Networks in Communities (SONIC) research group in the department of Industrial Engineering and Management Sciences at Northwestern University. His

research explores the dynamic and evolution of individual behavior and interactions in digital-enabled environments such as scientific collaboration, online communities, and virtual worlds using data mining, social network analysis, and economics approaches. He holds a doctorate in management science and information systems from McCombs School of Business at the University of Texas at Austin and bachelor's and master's degrees in computer science from Tsinghua University.



**Gerald C. (Jerry) Kane** is an Associate Professor of Information Systems at Boston College's Carroll School of Management and serves as the Guest Editor for Social Business at MIT Sloan

Management Review. His research interests include the role of information systems in social networks, organizational applications and implications of social media, and IT use in healthcare organizations. Dr. Kane has received grants from the National Science Foundation (CAREER) and US Army for his research on social media and was nominated twice by Boston College as the US Professor of the Year. His published research has appeared in MIS Quarterly, Information Systems Research, Organization Science, Management Science, Marketing Science, Harvard Business Review, and MIT-Sloan Management Review, among others. Dr. Kane received his Ph.D. from the Goizueta Business School of Emory University and M.B.A. in Computer Information Systems from Georgia State University.



**Brian Keegan** is a research associate at the Harvard Business School where he works as a data scientist for the HBX online learning platform. He uses methods from network science, data

mining, and statistics to understand the structure and dynamics of collaboration in "bursty" contexts. Previously, he was a post-doc in computational social science at Northeastern University where he researched election predictability using social media data and collective social behavior under shared attention to media events. He received a PhD from Northwestern University's School of Communication in 2012. His dissertation analyzed Wikipedia coverage of breaking news events as instances of high-tempo online collaborations. He received bachelors degrees from MIT in Mechanical Engineering and Science, Technology, and Society and grew up outside of Las Vegas, Nevada.



**Isabella Loaiza Saa** is a PhD student in the Technology and Social Behavior program at Northwestern University. She holds a B.A. in Business and a B.A. in Logistics and Production from

Universidad del Rosario. She is interested in Computational Social Science, Complex Systems Science and Big Data Analytics. Her research is aimed at understanding what causes the disparities in development among nations, and how Information and Communication Technologies can help harness the power of information and knowledge to promote economic growth.



**Michael Macy** earned his B.A. and Ph.D from Harvard and M.A. from Stanford. He is currently Goldwin Smith Professor of Arts and Sciences and Director of the Social Dynamics Laboratory at Cornell, with a dual appointment in the

Departments of Sociology and Information Science. With support from the National Science Foundation, Google, Minerva Initiative, and the National Research Foundation of Korea, his research team has used computational models, online laboratory experiments, and digital traces of device mediated interaction to explore familiar but enigmatic social patterns, such as circadian rhythms, lifestyle politics, fads, segregation, cooperation in social dilemmas, critical mass of

collective action, the spread of self-destructive behaviors and complex contagions, the polarization of opinion, and assimilation of minority cultures. His research has been published in leading journals, including Science, PNAS, American Journal of Sociology, American Sociological Review, and Annual Review of Sociology



**Jim Maddock** is a first year Ph.D. student in the Technology and Social Behavior program at Northwestern University, where he works with Darren Gergle to explore online peer production and collective action community dynamics. He completed his undergraduate degree at the University of Washington, working extensively with Kate Starbird on crisis informatics projects. When he's not thinking about research, Jim is likely riding one of his four bicycles..



**Meghan McCarter** is the Project Coordinator for SONIC Lab. She holds a BA from Northwestern University and plans to combine her experience in communication and research to pursue a career in Science Communication. She believes that improving science literacy is critical to overcoming the defining obstacles of her generation. Specifically, she would like to address issues of environmental policy, sustainability, and educational enrichment. She is entirely too enthusiastic to be cool.



**Peter Monge** is Professor of Communication at the Annenberg School for Communication and Journalism and Professor of Management and Organization at the Marshall School of Business, University of Southern California. He is also Co-Director of the Annenberg Networks Network, a research center focused on communication network theory and research, and Director of the Annenberg Doctoral Program. He has published five books - most recently, *Theories of Communication Networks* (with Noshir Contractor) – as well as theoretical and research articles on organizational communication networks, evolutionary and ecological theory, collaborative information systems, globalization, and research methods. He is an elected Fellow and a former president of the International Communication Association (ICA, 1997-

1998) and received the ICA Steven H. Chaffee Lifetime Achievement Award and the B. Aubrey Fisher Mentorship Award, where nine of his doctoral advisees have won dissertation awards. He is a Distinguished Scholar of the National Communication Association. From 1986 to 1993 he served as editor of *Communication Research*. In 2015 he received the USC Provost's Mentoring Award.



**Mayo Fuster Morell** holds a Ramon y Cajal researcher position at the Institute of Government and Public Policies at the Open University of Catalonia/Autonomous University of Barcelona, where she directs a research group on digital commons and Internet politics (IGOPnet.cc). She holds a PhD in social and political science from the European University Institute (dissertated on the governance of digital commons), a degree in Economics (University of Valencia), and a degree in Social and Cultural Anthropology (University Rovira i Virgili). She has been a visiting scholar at the School of Information of the University of California Berkeley and the Communication Department Stanford University.



**Sneha Narayan** is a fourth-year PhD student in the Technology and Social Behavior PhD program. Her research interests include understanding newcomer mobilization/socialization in peer production communities, and designing field experiments for online environments. She is a part of the Community Data Science Collective and is advised by Aaron Shaw.



**Jeffrey V. Nickerson** is a Professor in the School of Business at Stevens Institute of Technology. His research interests include peer production, collective intelligence crowdsourcing, distributed cognition, and systems design. His current research on remixing, collective design and collective problem solving is supported by the National Science Foundation. Prior to joining Stevens, his industry career that included roles at Time, AT&T, Salomon, and PwC. He serves on the boards of two companies in San Francisco and New York. He has a Ph.D. in Computer Science from New York University.



**Xiangju Qin** is a PhD student in Computer Science at University College Dublin, under the direction of Prof. Padraig Cunningham. Her research interests span Data Mining, Machine Learning, Bayesian Nonparametric Modeling, and Computational Social Science. Her graduate research focused on understanding the key elements that support and sustain successful online collaboration (particularly Wikipedia) using social network analysis and Bayesian nonparametric learning. Specifically, she studied the influence of social network structures and member turnover on the performance of virtual teams using social network theory to describe the difference between well-functioning and mal-functioning collaborative groups.



**Ruqin Ren** is interested in studying collective intelligence systems, group informational behaviors, using social network analysis, semantic analysis and other computational techniques. Prior to entering USC, Ruqin worked as a social media data analyst at Eli Lilly, using the studies of online policy advocacy communities to effectively organize and enable digital conversation. She holds an M.A. from Georgetown University's Communication, Culture, and Technology program, and B.A. in English, B.S. in Business Management from University of International Business in Beijing.



**Christoph Riedl** is assistant professor for Information Systems at the D'Amore-McKim School of Business at Northeastern University. He holds an appointment at and the College of Computer & Information Science, is a core faculty at the Network Science Institute, and a fellow at the Institute for Quantitative Social Science (IQSS) at Harvard University. He is recipient of a Young Investigator Award (YIP) for his work on social networks in collaborative decision-making. Before joining Northeastern University he was a post-doctoral fellow at Harvard Business School and IQSS. He received a PhD in Information Systems from Technische Universität München (TUM), Germany in 2011, a MSc in Information Systems in 2007, and a BSc in Computer Science in 2006. His work has been funded by NSF and published in leading business and computer science journals including *Management Science*,

Communications of the AIS, and International Journal of Electronic Commerce.



**Charlie Schweik** is a professor jointly appointed between the department of Environmental Conservation and the Center for Public Policy and Administration at the University of Massachusetts, Amherst. He is a social scientist working to understand Internet-based collective action and online commons-based peer production. Over the last decade, his research has focused on the study of open-source software communities, and the socio-technical systems and governance structures that support these systems of co-production. His book, *Internet Success: A Study of Open Source Software Commons* (MIT Press, 2012) analyzed more than 170,000 such projects, in an effort to explain what leads some to ongoing collaborative success and many others to early abandonment. With this grounding in open source collaboration complete, his current list of projects are expanding into other online peer-production settings that, in some way, mimic or borrow collaborative principles from open source software.



**Aaron Shaw** is an Assistant Professor in the Department of Communication Studies at Northwestern University and a Faculty Associate of the Berkman Center for Internet and Society at Harvard University. Aaron studies collective action, collaboration, and mobilization online. Most of his current projects identify organizational factors that determine whether peer production communities (like Wikipedia) and other open collectives online grow or not.



**Emily Sidnam** received her M.A. in Media, Technology and Society from Purdue University, with a minor in Social Networks & Social Capital. At Purdue, Emily contributed to a research project on Twitter and safety behavior for the Department of Homeland Security's VACCINE group, and her master's thesis explored how usage motivations and social capital may inform knowledge gaps in a social network site setting. Emily is currently pursuing her PhD in Communication at USC

Annenberg, where she is a member of the ANN research team. Broadly, her research interests include new media, social networks and media effects, focusing on topics such as usage motivations, information behavior, social capital and the digital divide.



**Kristen Steves** is a third-year PhD student at USC Annenberg interested in group and organization processes. She studies information flow and social dynamics in networks, focusing on how actors discretely extract information from reciprocal interactions among other actors. Additionally, Kristen seeks to understand the role of technology in transactive memory systems. Her interests also include complex adaptive systems as well as knowledge sharing and hiding. Kristen received her B.S. with honors in Communication with a minor in Education from Cornell University.



**Kyosuke Tanaka** is a first year PhD student in the Media, Technology, and Society program at Northwestern University, working in Noshir Contractor's SONIC lab. His research interests lie at the intersection of network science and web science. His recent work examines the role of self-disclosure via online social network profiles and the impacts of social media use in developing countries. He holds a Master of Social Research from Australian National University.



**Nathan TeGrotenhuis** is a first year Ma/P.H.D. student in the department of communication at the university of Washington. I'm just getting started on work with Benjamin Mako Hill looking at ecological studies of Debian, Wikia and Reddit. I was a developer for Microsoft before getting involved with the community at UW. I have recently enjoyed mentoring at community data science seminars and experimenting with Twitter bots.



**Marlon Twyman** is in the third year of the Technology and Social Behavior PhD program at Northwestern University. His research interests include on social networks, team assembly, and

collaboration. His current research involves quantitative statistical analysis and computational modeling. He enjoys collaborating and solving interdisciplinary research problems. He has a B.S. and M.S. in Biomedical Engineering and has had diverse research experiences in material science, biomedical engineering, technology policy, and human-centered design.



**Brian Uzzi** is a globally recognized scientist, teacher, consultant and speaker on leadership, social networks, and new media. He is the Richard L. Thomas Professor of Leadership and

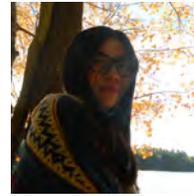
Organizational Change at the Kellogg School of Management, Northwestern University. He also co-directs NICO, the Northwestern Institute on Complex Systems, is the faculty director of the Kellogg Architectures of Collaboration Initiative (KACI), and holds professorships in Sociology at the Weinberg College of Arts of Sciences and in Industrial Engineering and Management Sciences at the McCormick School of Engineering. He has lectured and advised companies and governments around the world and been on the faculties of INSEAD, University of Chicago, and Harvard University. In 2007-2008, he was on the faculty of the University of California at Berkeley where he was the Warren E. and Carol Spieker Professor of Leadership.



**Rong Wang** is a doctoral candidate at the Annenberg School for Communication & Journalism, University of Southern California. Rong received her B.A. in Journalism and Communication

from Nanjing University, and her M.A. in Communications and New Media from National University of Singapore. Prior to USC, Rong worked at the International Development Research Centre (IDRC) with the Information and Networks program. Currently pursuing her doctoral degree at USC Annenberg, her research interests are focused on open social innovation, network analysis, organizational communication, and ICTD. Her work has been published at First Monday, Information Technologies & International Development (ITID),

and Journal of Community Psychology. She is currently working on a project about Commons-based peer production, which analyzes how different forms of engagement influence the structures of collaboration networks and outcomes of collaborative production.



**Yuehan (Grace) Wang** is the first year doctoral student at USC, School for Communication. Her current research interests are two folded: First, she wants to explore the factors affecting the

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**Yu Xu** is now a second-year Ph.D. student at USC Annenberg School for Communication and Journalism. He received his B.A. in communication from Fudan University in 2012. He graduated

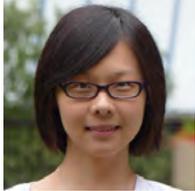
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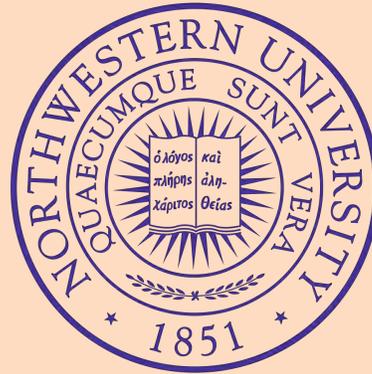
**Leila Zia** is a Research Scientist at the Wikimedia Foundation, the non-profit that runs Wikipedia. Her research interests span increasing content creation across Wikimedia projects including Wikipedia and Wikidata as well as understanding and improving access to Wikimedia's content using optimization, statistical learning, and data mining techniques. She received a PhD degree in Management Science and Engineering and a MSc in Operations Research from Stanford University, and a MSc in Industrial and Systems Engineering from Rutgers University.

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