# Christoph Riedl, Ph.D.

Associate Professor

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## **Appointments**

Fall 2019 – current	Northeastern University, Boston, MA, USA.
	Associate Professor, D'Amore-McKim School of Business (75%) and
	Khoury College of Computer Sciences (25%)
	Core Faculty, Network Science Institute
	Core Faculty, Center for Digital Humanities & Computational Social Science (NUlab)
2021 - 2023	Walsh Professor
2016 - 2018	Joseph G. Riesman Professor
2013 - 2019	Assistant Professor
Fall 2020 – current	MIT Sloan School of Management, Cambridge, MA.
	Visiting Faculty, Center of Collective Intelligence
Spring 2020	IMT Lucca, Institute of Advanced Studies, Lucca, Italy.
	Visiting Scholar
Fall 2019	Yale University, New Haven, CT, USA.
	Visiting Scholar
2012	H III ' ' C I 'I MA IICA
2013 – <i>current</i>	Harvard University, Cambridge, MA, USA.
	Fellow, Institute for Quantitative Social Science (IQSS)
	Affiliate Researcher, Laboratory for Innovation Science at Harvard University
2011 - 2013	Harvard University, Cambridge, MA, USA.
	Post-doctoral fellow at Harvard Business School (HBS) and the Institute for Quantitative
	Social Science (IQSS).
Education	
Education	
2007 - 2011	Technische Universität München, Munich, Germany.
	Ph.D. in Information Systems
2006 - 2007	M.Sc. in Information Systems
2002 - 2006	B.Sc. in Computer Science

#### **Research Interests**

Substantive: Network science, crowdsourcing, open innovation (communities & contests), social influence, teams.

*Methodological:* Computational social science, agent-based models, causal inference (esp. of peer effects), artificial intelligence, machine learning, digital experiments, game theory.

### **Awards and Honors**

- Christer Karlsson Best Paper Award of the Innovation and Product Development Management Conference 2021
- Walsh Professorship (D'Amore-McKim School of Business, 2021-2023)
- Most Novel Paper Award, Strategic Management Society Annual Conference 2020
- Best Paper Proceedings of the Academy of Management 2019 Meeting
- Faculty Mentor Junior Faculty Consortium, Academy of Management 2019 Meeting (OCIS Division)

- Best Published Paper Award, Oxford University Centre for Corporate Reputation (2019)
- Best Paper Award of the *Academy of Management Discoveries*, finalist (2018)
- Best Teacher Award (D'Amore-McKim School of Business, 2018)
- Joseph G. Riesman Professorship (D'Amore-McKim School of Business, 2016-2018)
- Copeland Best Paper Award (2017)
- Best Paper Award of the German Academic Association for Business Research (VHB), nominated as best paper in Information Systems (2017)
- European Research Paper of the Year, finalist (2017)
- DRUID Best Paper Award (2016)
- Best Lightning Talk Award, SocInfo Conference (2016)
- Young Investigator Program Award (YIP ARO; 2014)
- Excellence in Teaching Award, Northeastern University, nominated (2014/2015)
- Post-Doctoral Fellowship, German Research Foundation (DFG; 2011-2013).
- ISPIM-Wiley Ph.D. Innovation Dissertation Award, finalist (2012).
- University President's Performance Award for outstanding contributions at TUM (2009).

## **Grants (\$5.6m total external funding)**

- PI: "Micro and Meso Signatures of Success in Human-Autonomy Teams" with co-PIs Brooke Foucault Welles, Rich Radke (RPI), and Paul Sajda (Columbia University).

  Army Research Lab (ARL, STRONG Program), 2019-2022, \$1,500,000.
- **PI:** "Adaptive Intelligent Cognitive Agents to Enhance Performance in Face-to-Face and Virtual Teams" with co-PI Brooke Foucault Welles.

  Army Research Lab (ARL, STRONG Program), 2019-2020, \$100,000.
- PI (subcontract): "Resolving Organizational Inefficiencies Through Crowdsourcing" Small Business Innovation Research (SBIR) with 361 Interactive Inc.

  Defense Advanced Research Projects Agency (DARPA), 2019-2023, \$300,000.
- **PI** (subcontract): "System for Group Learning and Optimization of Collaborative Workflows" Small Business Innovation Research (SBIR) with Charles River Analytics Inc.

  Defense Advanced Research Projects Agency (DARPA), 2018-2022, \$250,000.
- **Co-PI:** "Cultivating Collective Intelligence in Human-Computer Systems" with co-PIs Anita Woolley (CMU), Thomas Malone (MIT), and Michael Bernstein (Stanford).

  Defense Advanced Research Projects Agency (DARPA), 2016-2019, \$800,000.
- Co-PI: "Advancing Human-based Modeling with Large-Scale High Performance Computing" with co-PIs Alessandro Vespignani, Albert-László Barabási, David Lazer, Kate Coronges, Tina Eilassi-Rad, Brooke Foucault Welles (all Northeastern).
  - Office of Naval Research (ONR, DURIP), 2017, \$920,000.
- **Co-PI:** "Team Communication Unpacked: A Pilot Study of Team Communication Process and Performance Captured in a Smart Meeting Room" with co-PI Brooke Foucault Welles. Northeastern University, 2017-2018, \$50,000.
- **PI:** "Large-Scale Online Collaboration in Hierarchical Networks." Office of Naval Research (ONR), 2016-2019, \$415,000.
- **PI:** "Understanding Online Creative Collaboration Over Multidimensional Networks" with co-PIs Noshir Contractor (Northwestern University) and Janet Fulk (University of Southern California). National Science Foundation (NSF), 2015-2018, *\$1,200,000*.

REU supplement: \$8,000

PI: "Social Network Processes in Collaborative Decision-Making."

Young Investigator Program Award (YIP ARO), 2014-2017, \$150,000.

URAP supplement: \$4,000

**PI:** "Extracting and Visualizing Multi-Dimensional Text Networks: Tools for Structural Reading and Text Exploration" with co-PIs Dietmar Offenhuber, Nick Beauchamp, David Smith. Northeastern University, 2014-2015, \$50,000.

## **PUBLICATIONS** (Google Scholar (GS) h-index: 23; i10: 33; total citations: 2,651)

(PhD student or post-doc co-authors are underlined; \* denotes corresponding author or lead senior author, including funding acquisition)

### Working Papers & Currently Under Review

- "Competition and Collective Intelligence: The Moderating Effect of Sex Composition" (with Anita Woolley, Rosalind Chow, <u>Anna Mayo</u>, Jin Wook Chang).
  - Press coverage:
  - "Making the Most of Top Female Staff," Financial Times.
- "Strategic Behavior in Contests: Evidence from a Large-Scale Field Study" (with Tom Grad and Christopher Lettl). Presented at DRUID and NBER SI. Working paper at <u>SSRN</u>.
- "Driven to Out-Code: Rivalry and Competition amongst Knowledge Workers" (with Tom Grad and Gavin Kilduff).
  - Accepted for presentation at Munich Summer Institute.
- "From Innovators to Adaptors: How Collaboration Affects Creativity in Online Crowds" (with Marcel Rhyn, Ivo Blohm and Jan Marco Leimeister)
- "The effects of creative and technical constraints on learning to explore a design space: Evidence from an online design community" (with Victor Seidel).
  - Christer Karlsson Best Paper Award of the *Innovation and Product Development Management Conference* 2021.
- "Towards a Microprocess Theory of Search: Performance Variance, Financial Slack, and Exploration—Exploitation Behavior" (with Sheen Levine and <u>Charlotte Reypens</u>). Working paper available on <u>SSRN</u>.
  - Most Novel Paper Award, Strategic Management Society Annual Conference 2020
  - Best Paper Competition Finalist, Strategic Management Society Annual Conference (London, 2020).
- "Do Cash Incentives Motivate Performance? Incentives, Participation, and Design Quality in Crowdsourcing Contests" (with Katja Hutter, Johann Füller, and Gerard Tellis).
- "Active inference, model alignment, and synchrony in small groups" (with <u>Samuel Westby</u>, and <u>Brennan Klein</u>).

## **Journal Articles**

**Riedl, C.\***, Kim, Y.J., <u>Gupta, P.</u>, Malone, T.W., Woolley, A.W. (2021). "Quantifying Collective Intelligence in Human Groups," <u>Proceedings of the National Academy of Sciences (PNAS)</u>, 118 (21) e2005737118 (5-year IF: **10.620**).

Awards and Press coverage:

- "The Future of Work Is More Than About Where We Work— Who Works," Forbes.
- "Die Koordination ist entscheidend," Spektrum.
- "Working in group? You'll want more women in your team!," *Daily Mail*.
- "Key to better teamwork? More women!", Daily Mail (print issue May 18).
- <u>Foley, M.</u>, Smead, R., Forber, P., **Riedl, C.\*** (2021). "Avoiding the Bullies: Resilience of Cooperation among Unequals," *PLoS Computational Biology*, 17(4), e1008847, <u>replication data</u>.
- Balietti, S., Riedl, C.\* (2021). "Incentives, competition, and inequality in markets for creative production," *Research Policy*, 50(4), 104212, replication data.
- <u>Fulker, Z.</u>, Forber, P., Smead, R., **Riedl, C.\*** (2021). "Spite is Contagious in Dynamic Networks," <u>Nature Communications</u>, 12(260), <u>replication data</u> (5-year IF: **13.610**).

- Balietti, S., Klein, B., Riedl, C.\* (2021). "Optimal Design of Experiments to Identify Latent Behavioral Types," *Experimental Economics*, 24(3), 772–799. Preprint at arXiv, replication data.
- **Riedl, C.**, Woolley, A. (2020). "Successful Remote Teams Communicate in Bursts," *Harvard Business Review*, October, 2020.
- **Riedl, C.,** Seidel, V., Woolley, A., Kane, G. (2020). "Make Your Crowd Smart," *Sloan Management Review*, 61(4), Summer 2020.
- <u>Fraiberger, S., Sinatra, R.</u>, Resch, M., **Riedl,\* C.**, Barabási, A.L. (2018). "Quantifying Reputation and Success in Art" (shared last author with ALB). <u>Science</u>, 362(6416), 825-829, (cover story; 5-year IF: **41.058**). Replication code and data on <u>Dataverse</u>.

  Awards and Press coverage:
  - "The Art Market Often Works in Secret. Here's a Look Inside," New York Times.
  - Best Published Paper Award, Oxford University Centre for Corporate Reputation
  - "The Surprising Formula for Becoming an Art Star," *The Wall Street Journal*.
  - "To get to the top of the art world, start there in the first place," *The Economist*.
  - "In Art, Who You Know Pays Off More Than Hard Work," *Bloomberg*.
  - "How to be a Successful Artist, According to Science," *Newsweek*.
  - "The secret to becoming a successful artist now," *Quartz*.
  - "Viel Sonne und wenig Sorgen," Zeit Online.
  - "Want to be a Successful Artist? You'll Need the Right Social Connections, Study Says," wbur90.9.
  - "For artists, success really does depend on who, not what, you know," *Cosmos*.
  - "Moneyball for the Art World," ArtNews.
  - "What's the Secret to Making It as an Artist?" ArtNet.
  - "In art, success depends on who you know," *The Japan Times*.
  - "Why there are no more von Goghs," <u>News@Northeastern</u>.
- **Riedl,\*** C., Seidel, V. (2018). "Learning from Mixed Signals in Online Innovation Communities,"

  <u>Organization Science</u>, 29(6), 1010-1032.

  Awards:

  (35 GS citations)
  - DRUID Best Paper Award.
- **Riedl, C.,** Bjelland, J., Canright, G., Iqbal, I. Engø-Monsen, K., Qureshi, T. Sundsøy, P.R., Lazer, D. (2018). "Product Diffusion Through On-Demand Information-Seeking Behavior," *Journal of the Royal Society Interface*, 15(139), 20170751, (5-year IF: 4.216). Replication code and data on <u>Dataverse</u>.
- <u>Foley, M.</u>, Forber, P., Smead, R., **Riedl,\*** C. (2018). "Conflict and Convention in Dynamic Networks," *Journal of the Royal Society Interface*, 15(140), 2017075. Companion <u>website</u> with interactive visualization with explorable explanations and replication code.
- **Riedl,\*** C., Woolley, A.W. (2017). "Teams vs. Crowds: A Field Test of the Relative Contribution of Incentives, Member Ability, and Emergent Collaboration to Crowd-Based Problem Solving Performance," *Academy of Management Discoveries*, 3(4), 382-403. Code on <u>GitHub</u>.

Companion publication, press coverage, and awards:

(83 GS citations)

- Best Paper Award of the Academy of Management Discoveries, runner-up (2018).
- **Riedl, C.**, Woolley, A.W. (2018). "Bursty' Communication Can Help Remote Teams Thrive," <u>Behavioral Scientist</u>, May 29<sup>th</sup>., 18,000 page views in first month, #5 most popular article in 2018.
- "Covid-19 has forced a radical shift in working habits," The Economist.
- "Remote Work Is Here to Stay. Bosses Better Adjust," Wall Street Journal.
- "5 ways managers can adapt to the work-from-home-force," *Business Insider*.
- "How the best remote teams communicate," *Quartz*.
- "Working Remotely? Try 'Bursty' Communication," Convene Magazine.
- "Working from home doesn't kill collaboration," *LinkedIn Daily Rundown*.
- TED WorkLife with Adam Grant, episode on creativity.

Boudreau, K., Guinan, E., Lakhani, K., **Riedl, C.** (2016). "Looking Across and Looking Beyond the Knowledge Frontier: Intellectual Distance and Resource Allocation in Science," *Management Science*, 62(10), 2765-2783 (lead article; authors alphabetical, equal contributions).

Press coverage and awards: (298 GS citations)

• Most read research paper in Management Science.

- Copeland Best Paper Award.
- "The Four-Letter Code to Selling Just About Anything," *The Atlantic*, Jan/Feb Issue, 2017.
- "Why Experts Reject Creativity," *The Atlantic*.
- "Most people are secretly threatened by creativity," Quartz.
- "Most in the Workplace Are Secretly Threatened By Creativity," <u>Government Executive</u>.
- "Highly novel research proposals 'being systematically rejected," Times Higher Education.
- "Tough Crowd," *The Scientist*.
- "Out of the box ideas are a hard sell for most innovators," *The Current*.
- "Enhancing the Effectiveness of Team Science," National Research Council report (2015).
- Blohm, I., **Riedl**, C., Füller, J., Leimeister, J.M. (2016). "Rate or Trade? Identifying Winning Ideas in Open Idea Sourcing," *Information Systems Research*, 27(1), 27-48.

(98 GS citations)

- **Riedl, C.,** Zanibbi, R., Hearst, M.A., Zhu, S., Menietti, M., Crusan, J., Metelsky, I., Lakhani, K. (2016). "Detecting Figures and Part Labels in Patents: Competition-Based Development of Image Processing Algorithms," *International Journal on Document Analysis and Recognition*, 19(2), 155-172. Data on <u>UCI Machine Learning Repository</u>. (17 GS citations)
- **Riedl, C.**, Köbler, F., Goswami, S., Krcmar, H. (2013). "Tweeting to Feel Connected: A Model for Social Connectedness in Online Social Networks," *International Journal of Human-Computer Interaction*, 29(10), 1-18. (88 GS citations)
- **Riedl, C.**, Blohm, I., Leimeister, J. M., Krcmar, H. (2013). "The Effect of Rating Scales on Decision Quality and User Attitudes in Online Innovation Communities," *International Journal of Electronic Commerce*, 17(3), 7-36 (5-year IF: **6.135**). (95 GS citations)
- **Riedl, C.**, Leimeister, J. M., Krcmar, H. (2012). "Why e-Service Development is Different: A Literature Review," *e-Service Journal*, 8(1), 2-22. (20 GS citations)
- **Riedl, C.**, Leimeister, S., Böhm, M., Yetton, P., Krcmar, H. (2010). "Competing in the Clouds: A Strategic Challenge for ITSP Ltd.," *Communications of the AIS*, 27(1), 725-742.

(17 GS citations)

- **Riedl, C.**, May, N. Finzen, J., et al. (2009). "An Idea Ontology for Innovation Management," *International Journal on Semantic Web and Information Systems*, 5(4), 1-18. Code on <u>GitHub</u>. (92 GS citations)
- **Riedl, C.**, Böhmann, T., Rosemann, M., Krcmar, H. (2009). "Quality Management in Service Ecosystems," *Information Systems and e-Business Management*, 7(2), 199-221. (78 GS citations)

## **Refereed Conference Articles**

(Note: in computer science, conference proceedings are considered a terminal publication.)

- Song, J., Riedl, C., Malone, T.W. (2021). "Online Mingling: Supporting Ad Hoc, Private Conversations at Virtual Conferences," *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI'21). Online (originally Yokohama, Japan). Working paper at SSRN.
  - Video abstract: https://youtu.be/Xruflul84ik
  - "Zoom calls can be too formal. These alternatives encourage casual chatting," Fast Company.
  - "Remote workers want to re-create those watercooler moments, virtually," MIT Technology Review.
  - "Water cooler moments don't have to disappear in the virtual workplace,", *Quartz*.
  - "App developed at MIT, Northeastern looks to connect strangers via video chat," <u>Boston Globe</u>.

- Zhang, Z., Bhattacharya, I., Morgan, M., Foley, M., Riedl, C., Welles, B.F., Radke, R. (2020). "Multiparty Visual Co-Occurrences for Estimating Personality Traits in Group Meetings," *Proceedings of IEEE Winter Conference on Applications of Computer Vision* (WACV 2020), Aspen, CO.
- Zhang, L., Morgan, M., Bhattacharya, I., Foley, M., Braasch, J., Riedl, C., Welles, B.F., Radke, R.J. (2019). "Improved Visual Focus of Attention Estimation and Prosodic Features for Analyzing Group Interactions," *Proceedings of ACM International Conference on Multimodal Interaction*, Suzhou, Jiangsu, China. October 14-18, 2019.
- **Riedl,\*** C., Grad, T., Lettl, C. (2019). "Strategic Behavior in Contests: Evidence from a Large-Scale Field Study," *Academy of Management Best Paper Proceedings 2019*.
- Bhattacharya, I., Foley, M., Ku, C., Zhang, N., Zhang, T., Mine, C., Li, M., Ji, H., Riedl, C., Welles, B.F., Radke, R. (2019). "The Unobtrusive Group Interaction (UGI) Corpus," *Proceedings of 10th ACM Multimedia Systems Conference 2019*, Amherst, MA, June 18-21th, 2019.
- Bhattacharya, I., Foley, M., Zhang, N., Zhang, T., Ku, C., Mine, C., Ji, H., Riedl, C., Welles, B.F., Radke, R. (2018). "A Multimodal-Sensor-Enabled Room for Unobtrusive Group Meeting Analysis," *Proceedings of 20th ACM International Conference on Multimodal Interaction*, Boulder, CO, October 16-20th, 2018.
- Wachs, J., Daróczy, B., Hannak, A., Páll, K., Riedl,\* C. (2018). "And Now for Something Completely Different: Visual Novelty in an Online Network of Designers," *Proceedings of 10th ACM Conference on Web Science* (WebSci'18), Amsterdam, 27-30 May 2018.
- **Riedl,\*** C., Seidel, V. (2016). "Design myopia and vicarious learning from good versus bad examples: Evidence from creative design competitions", *ACM Collective Intelligence*, New York City, NY.
- **Riedl,\* C.**, Seidel, V. (2016). "Design myopia and vicarious learning from good versus bad examples: Evidence from creative design competitions", *Academy of Management Best Paper Proceedings 2016* (1), 12773.
- <u>Foley, M.</u>, **Riedl,\* C.** (2015). "Collective Problem-Solving by Heterogeneous Agents in Network Environments," *Collective Intelligence*, Santa Clara, CA.
- Lazer, D., Meleis, W., Wells, B. F., **Riedl, C.**, Radford, J., Keegan, B., Ognyanova, K., Wojcik, S., Hoye, J., Karbeyaz, C. (2015). "Performing Massively Open Online Social Experiments with Volunteer Science," *Workshop on Crowdsourcing and Online Behavioral Experiments* at the *ACM Conference on Economics and Computation*, Portland, OR, USA.
- Nagle, F., **Riedl, C.** (2014). "Online Word of Mouth and Product Quality Disagreement" (authors listed alphabetically). *Academy of Management Best Paper Proceedings 2014 (1), 15681.*
- Keegan, B., Ognyanova, K., Welles, B. F., **Riedl, C.**, Karbeyaz, C., Meleis, W., Lazer, D., Radford, J., Hoye, J. (2014). "Conducting Massively-Open Online Social Experiments with Volunteer Science," *Human Computation Workshop* (HCOMP), Pittsburgh, PA.
- Blasco, A., Boudreau, K., Lakhani, K., Menietti, M., **Riedl, C.** (2013). "Do Crowds have the Wisdom to Self-Organize?" (authors alphabetical), *Workshop on Information Systems and Economics*, Milan, Italy.
- Blohm, I., **Riedl, C.**, Füller, J., Köröglu, O., Leimeister, J. M., Krcmar, H. (2012). "The Effects of Prediction Market Design and Price Elasticity on Trading Performance of Users: An Experimental Analysis," *Proceedings of Collective Intelligence 2012*, Cambridge, MA, USA.
- Blohm, I., Riedl, C., Leimeister, J. M., Krcmar, H. (2011). "Idea Evaluation Mechanisms for Collective Intelligence in Open Innovation Communities: Do Traders Outperform Raters?," *Proceedings of Thirty Second International Conference on Information Systems* (ICIS'11), Shanghai, China. (98 GS citations)
- **Riedl, C.**, Blohm, I., Leimeister, J. M., Krcmar, H. (2010). "Rating Scales for Collective Intelligence in Innovation Communities: Why Quick and Easy Decision Making Does Not Get it Right," *Thirty First International Conference on Information Systems* (ICIS'10), St. Louis, MO, USA. (174 GS citations)

- Riedl, C., Wagner, S., Leimeister, J. M., Krcmar, H. (2010). "Exploring Large Collections of Ideas in Collaborative Settings through Visualization," *Proceedings of 20th Annual Workshop on Information Technologies and Systems*, St. Louis, MO, USA.
- Leimeister, S., **Riedl, C.**, Böhm, M., Krcmar, H. (2010). "The Business Perspective of Cloud Computing: Actors, Roles, and Value Networks," *Proceedings of 18th European Conference on Information Systems* (ECIS'10), Pretoria, South Africa. (385 GS citations)
- Köbler, F., **Riedl, C.**, Vetter, C., Leimeister, J. M., Krcmar, H. (2010). "Social Connectedness on Facebook An explorative study on status message usage," *Proceedings of 16th Americas Conference on Information Systems* (AMCIS'10), Lima, Peru. (131 GS citations)
- Kohlborn, T., Lübeck, C., Korthaus, A., Fielt, E., Rosemann, M., Riedl, C., Kremar, H. (2010). "How Relationships can be Utilized for Service Bundling," *Proceedings of 16th Americas Conference on Information Systems* (AMCIS'10), Lima, Peru.
- Kohlborn, T., Lübeck, C., Korthaus, A., Fielt, E., Rosemann, M., **Riedl, C.**, Krcmar, H. (2010). "Conceptualising a Bottom-up Approach to Service Bundling," *Proceedings of 22nd International Conference on Advanced Information Systems Engineering*, Hammamet, Tunesia.
- Kohlborn, T., Lübeck, C., Korthaus, A., Fielt, E., Rosemann, M., Riedl, C., Krcmar, H. (2010). "Identification and specification of relationships as the foundation for service bundling," *Proceedings of Workshop on Ontology, Conceptualization and Epistemology for Information Systems, Software Engineering and Service Science*, Hammamet, Tunesia.
- Finzen, J., **Riedl, C.**, May, N., Stathel, S. (2010). "Innovation in the Internet of Services," *Proceedings of XX International RESER Conference*, September 30th October 2nd 2010, Gothenburg, Sweden.
- **Riedl, C.**, Böhmann, T., Leimeister, J. M., Krcmar, H. (2009). "A Framework for Analysing Service Ecosystem Capabilities to Innovate," *Proceedings of 17th European Conference on Information Systems* (ECIS'09), Verona, Italy. (55 GS citations)
- **Riedl, C.**, Leimeister, J. M., Krcmar, H. (2009). "New Service Development for Electronic Services A Literature Review," *Proceedings of the Fifteenth Americas Conference on Information Systems* (AMCIS'09), San Francisco, California.
- **Riedl, C.**, May, N., Finzen, J., Stathel, S., et al. (2009). "Managing Service Innovations with an Idea Ontology," *Proceedings of XIX International RESER Conference*, September 24th-26th 2009, Budapest, Hungary.
- Kohlborn, T., Korthaus, A., **Riedl, C.**, Krcmar, H. (2009). "Service Aggregators in Business Networks," *Proceedings of the 1st Workshop on Service-Oriented Business Networks and Ecosystems* (SOBNE '09) at IEEE EDOC, 2nd September, Auckland, New Zealand. (36 GS citations)
- Stathel, C., Finzen, J., **Riedl, C.**, May, N. (2008). "Service Innovation in Business Value Networks," *Proceedings of XVIII International RESER Conference*, Stuttgart, Germany.

#### **Non-Refereed Journal Articles**

- **Riedl, C.** (2011). "Business Network Transformation," *Electronic Markets*, 21(3), 209–211.
- Böhm, M., Herzog, A., **Riedl, C.**, Leimeister, S., Krcmar, H. (2010). "Cloud Computing als Treiber der IT-Industrialisierung? Ein Vergleich mit der Automobilbranche," *Information Management und Consulting* (IMC), 25(5), 46-54 (in German).
- Böhm, M., Leimeister, S., **Riedl, C.**, Krcmar, H. (2009). "Cloud Computing: Outsourcing 2.0 oder ein neues Geschäftsmodell zur Bereitstellung von IT-Ressourcen?," *Information Management und Consulting* (IMC), 24(2), 6-14 (in German). (64 GS citations)
- **Riedl, C.**, Schöfmann, J., Müller, M. (2007). "Integration eines Avatars in ein SAP R/3 System Projektpraktikum," *WIRTSCHAFTSINFORMATIK* 49 (WI) (2007) 4, 314-317 (in German).

## Monographs

Riedl, C. (2011). "Tool-Supported Innovation Management in Service Ecosystems," Gabler, Wiesbaden, Germany.

## **Book Chapters**

- Böhm, M., Leimeister, S., **Riedl, C.**, Krcmar, H. (2012). "Cloud Computing and Computing Evolution," In: S. Murugesan (ed.) *Cloud Computing: Technologies, Business Models, Opportunities and Challenges*, CRC Press, Boca Raton, FL.
- **Riedl, C.**, Leimeister, J. M., Krcmar, H. (2011). "Service Innovation for Electronic Services," In: Ahson, S. and Ilyas, M. (eds.) *Service Delivery Platforms: Developing and Deploying Converged Multimedia Services*, CRC Press, Boca Raton, FL.
- Böhm, M., Leimeister, S., **Riedl, C.**, Krcmar, H. (2011). "Cloud Computing Outsourcing 2.0 or a new Business Model for IT Provisioning?" In: F. Keuper, C. Oecking, A. Degenhardt (eds.) *Application Management*, Gabler, Wiesbaden, Germany. (192 GS citations)
- Böhm, M., Koleva, G., Leimeister, S., **Riedl**, C., Krcmar, H. (2010). "Towards a Generic Value Network for Cloud Computing," In: J. Altmann, O. Rana (eds.) *Economics of Grids, Clouds, Systems, and Services*, Lecture Notes on Computer Science (LNCS), No. 6296, Springer, Berlin-Heidelberg, Germany, 129-140. (140 GS citations)

## **Invited Conference Papers**

- Boudreau, K., Gaule, P., Lakhani, K., Riedl, C., and Woolley, A. (2013). "From Crowds to Collaborators: Initiating Effort & Sustaining Collaboration Among Online Creative Workers," *Proceedings of Quality Information in Organizations and Society, SIG Information Quality, AIS Workshop 2014*, Milan, Italy.
- **Riedl, C.**, Böhmann, T., Rosemann, M., Krcmar, H. (2008). "Quality Aspects in Service Ecosystems: Areas for Exploitation and Exploration," *Proceedings of 10th International Conference on Electronic Commerce* (ICEC'08), Innsbruck, Austria.

## **Datasets, Replication, Software**

GitHub repository with R code for key papers https://github.com/riedlc.

MENAM ART MAP, Armory Show exhibition, New York City, March 2015 (text-network analysis and visualization).

Google Trends with R, blog post, http://bit.ly/1loclw4 (more than 6,000 views).

USPTO Algorithm Challenge Dataset, UCI Machine Learning Repository, http://bit.ly/100cWia.

**MeshR:** Analyzing Scientific Knowledge Generation using PubMed Citation Data and Medical Subject Headings (MeSH) – A package for the R statistical language (with Kevin Boudreau and Karim Lakhani). Accompanied by Vignette "Computational Social Science: Analyzing Scientific Knowledge Generation using PubMed Citation Data with MeshR."

## **Teaching Cases**

- **Riedl, C.**, and Hogan, T. (2014). "Fluitec Wind: Improving Sustainability Through Predictive Analytics," *D'Amore-McKim School of Business Teaching Case*, incl. programming tutorial, sample data, and teaching note.
- Wesley, D., **Riedl, C.** (2014). "Google Skybox: Monitoring Planet Earth in High Definition," *D'Amore-McKim School of Business Teaching Case*, incl. programming tutorial, sample data, and teaching note.
- **Riedl, C.**, Leimeister, S., Böhm, M., Yetton, P., Krcmar, H. (2010). "Competing in the Clouds: A Strategic Challenge for ITSP Ltd.," *Communications of the AIS*, 27(1), 725-742, case and teaching note.

Platform Business Models, Executive Education (2019-2021).

BUSN 6343 – Crowdsourcing and Digital Business Transformation, MBA, fall 2018, 2020.

NETS 7341 – Network Economics, Ph.D. (interdisciplinary), spring 2017, 2019, 2021.

MGMT 6233 / MISM 6203 - Business Analytics, MBA & MS Data Science, fall 2015, 2016, 2017, 2020, spring 2018, 2019, 2021.

BUSN 6320 – Business Analytics Fundamentals, MBA, fall 2014, 2015, 2016, 2017, spring 2018.

AI 5050 – Data Mining in Cyberspace, College of Computer and Information Science, graduate, spring 2015.

MISM 2301 – Management Information Systems, undergraduate, fall 2013, spring & fall 2014.

SCHM 6222 – Emerging Issues in Supply Chain Management, MBA (guest lecturer)

MKTG 4508 – Digital Marketing, undergraduate, fall 2013, spring 2014 (guest lecturer).

CS 5750 - Social Computing, College of Computer and Information Science, graduate, fall 2013 (guest lecturer).

PPUA 5262 – Big Data for Cities, School of Pubic Policy and Urban Affairs, graduate, spring 2014, (guest lecturer).

*Econometrics and Quantitative Research Methods*. International seminar for doctoral students at University of Cologne, Germany, invited lecturer, 2012.

Reference Models for the Service Industry, Technische Universität München, graduate, spring 2008, 2009, 2010.

*Information and Knowledge Management*, Technische Universität München, graduate, about 90 students, fall 2007, 2008, 2009.

### **Adviser for Students and Post-Doctoral Fellows**

- V Lange, PhD in Network Science, 2020-
- Nunzio Lore, PhD in Network Science, 2020-
- Sam Westby, PhD in Network Science, 2020-
- Carolina Mattsson, Dissertation Committee (Network Science, Northeastern University), 2020
- Xindi Wang, Dissertation Committee (Network Science, Northeastern University), 2019
- Anna Mayo, Dissertation Committee (Carnegie Mellon University), 2019
- Marcel Rhyn, Dissertation Committee (University St. Gallen, Switzerland), 2019
- Jaemin Lee, Post-Doc, 2018-2020 (now assistant professor at Chinese University of Hong Kong)
- Zachary Fulker, PhD in Network Science, 2018-
- Brennan Klein, PhD in Network Science, 2015
  - o Recipient of NDSEG Fellowship
- Michael Foley, PhD in Network Science, 2014-2020
- Stefano Balietti, Post-Doc, 2016-2019 (Microsoft Research NYC, now assistant professor University of Mannheim)
- Samuel Fraiberger, Post-Doc, 2015-2017 (Data Scientist at the World Bank and Visiting Scholar at NYU Computer Science Department)
- Yuxuan Wang, undergraduate research assistant, 2017-2018
  - o His work accepted for presentation at National Collegiate Honors Council.
- Tom Grad, visiting PhD student (WU Wien), 2017
- Johannes Wachs, visiting PhD student (Central European University), 2017
- Christina Sirabella, undergraduate research assistant, 2016
- Tina Lee, undergraduate research assistant, 2016-2017
- Michael Yang, undergraduate research assistant, 2016-2017
- Le Chen, Dissertation Committee (CCIS), 2017
- Varsha Pahilani, graduate teaching assistant (CCIS), 2015

- Ruiyang Xu, graduate research assistant (CCIS), 2014
- Jacob Moody, undergraduate research assistant and Independent Study, 2014-
- Christian Schiller, Master's Thesis, 2011
- Florian Ernst, Robert Hundeshagen, and Daniel Orth, Economics Semester Project, 2011
- Florian Gall, Master's Thesis (UC Berkeley iSchool, joint supervision with Yale Braunstein), 2010
- Gregor Wachala, Interdisciplinary Project, 2010
- Steffen Wagner, Interdisciplinary Project, 2010
- Christian Lübeck, Master's Thesis (QUT, joint supervision with Michael Rosemann), 2009
- Karim Djelassi, Bachelor's Thesis, 2009
- Julian Riediger, Bachelor's Thesis, 2009
- Johannes Tiefenthaler, Master's Thesis, 2008

#### **Professional Services**

## **Conference Chair and Leadership Positions**

- Elected member of ACM Collective Intelligence Conference Steering Committee (2021).
- Elected Conference Chair, ACM Collective Intelligence Conference 2020, Boston, MA.
- Chair of Scientific Advisory Board, Ludwig Boltzman Gesellschaft, Vienna, Austria.

#### **Editorial Board**

• Founding Editorial Review Board member, Academy of Management Discoveries, 2016-current.

## Program Committee, Associate Editor, Workshop Organizer

- Nominated Member Program Committee ACM Collective Intelligence Conference 2019, Carnegie Mellon University
- Member of the Advisory Panel, Ludwig Boltzmann Gesellschaft, Vienna, Austria, 2019
- Associate Editor for ICIS 2018: Sharing Economy and Crowd Markets
- Program Committee ACM Collective Intelligence Conference, Zurich, Switzerland, 2017
- Program Committee SocInfo, September 13-15, 2017, Oxford UK
- Co-organizer for a workshop on "Designing Online Experiments: Citizen Science Approaches to Research," at CSCW, 2016, San Francisco, CA
- AE Track "Crowdsourcing, Crowdfunding, Blockchain and the Sharing Economy", ICIS, 2016
- Program Committee International Conference on Computational Social Science (IC2S2), June 23-26 2016, Evanston, IL
- Program Committee 24th International World Wide Web Conference Web Science Track, 2015, Florence, Italy
- Program Co-Chair and Steering Committee "ASE/IEEE 2014 Big Data Conference," Cambridge, MA
- AE Track "Decision Analytics, Big Data, and Visualization" at ICIS 2014, Auckland, New Zealand
- Discussant "Platform Strategy Research Symposium" 2013, Boston University, Boston, MA
- Program Committee "Quantifying Success," satellite meeting at ECCS'13, Barcelona, Spain
- AE Track "Service Engineering and Service Management" at ECIS 2013, Utrecht, Netherlands
- Program Committee "12th Workshop on E-Business", 2012, Chicago, IL
- Program Committee "11th Workshop on E-Business" at ICIS 2012, Orlando, FL
- Program Committee "10th Workshop on E-Business" at ICIS 2011, Shanghai, China
- Minitrack Co-Chair "Virtual Communities" at AMCIS 2011, Detroit, MI, USA
- Workshop Co-Chair "1st Workshop on New Value Creation Models and Services through Cloud Computing" at 40. Annual Meeting of the Association for Informatics (GI Jahrestagung), Informatik 2010
- Workshop Co-Chair "1st Workshop on Service-Oriented Business Networks and Ecosystems" at IEEE EDOC 2009

### Reviewing

Science Advances, Management Science, Organization Science, MIS Quarterly, Information Systems Research, Journal of Management Information Systems, Research Policy, Information & Management, Decision Support Christoph Riedl Systems, Transactions on Knowledge and Data Engineering, Journal of Computer-Mediated Communication, Communications of the AIS, R&D Management, Electronic Markets, Journal of Electronic Commerce Research, Information Systems and e-Business Management Journal, Electronic Commerce Research and Applications.

Leading conferences: ICIS, ECIS, AMCIS, ACIS, HICSS.

#### **Presentations and Talks**

- "Preferential Interaction and the Emergence of Spite: Endogenous Correlation on an Evolving Network," (with Zachary Fulker, Rory Smead, and Patrick Forber) accepted regular talk at NetSci'20, Rome, Italy 17<sup>th</sup> September.
- "Team Communication Research in the Age of Artificial Intelligence," accepted panel at NCA 106th Annual Convention (with Brooke Foucault Welles, Javier Garcia, Nina Lauharatanahirun, Noshir Contractor, Leslie DeChurch, and Rabindra Ratan).
- "How Human-Agent Teams Will Revolutionize the Future of Work," 2020 INGRoup conference, Seattle, WA.
- Keynote "Quantifying Reputation and Success in Art", University of Amsterdam, The Netherlands, March 20th, 2020.
- Invited talk "Avoiding the Bullies: How High-Ability Agents Promote Cooperation in Social Networks", IMT Lucca, March 12<sup>th</sup>, 2020.
- "What directs search? Experimental evidence on some triggers of exploration," (with Sheen Levine) accepted presentation at Organization Science Winter Conference, 2020.
- "Strategic Behavior in Contests with Ability Heterogeneous Agents: Evidence from Field Data," Academy of Management Annual Meeting, Boston, MA, August 9<sup>th</sup>, 2019.
- Accepted talk "Strategic Behavior in Contests with Ability Heterogeneous Agents: Evidence from Field Data," NBER Summer Institute, Cambridge, MA, July 18<sup>th</sup>, 2019.
- "Avoiding the Bullies: How High-Ability Agents Promote Cooperation in Social Networks", NetSci Conference, Burlington, VT, May 27-31, 2019.
- Invited talk "Strategic Behavior in Contests with Skill Heterogeneous Agents: Evidence from Field Data," Digital Innovation Workshop 2019, Boston College, Chestnut Hill, MA, May 3<sup>th</sup>, 2019.
- Invited talk "Quantifying Reputation and Success in Art", UMass Amherst, Amherst, MA, 11th April 2019.
- Invited talk "Quantifying Reputation and Success in Art", Yale University, New Haven, CT, 27<sup>th</sup> March 2019.
- Invited talk "Strategic Behavior in Contests with Skill Heterogeneous Agents: Evidence from Field Data", Economics Department, Northeastern University, Boston, MA, 27<sup>th</sup> February 2019.
- Invited talk "Learning from Mixed Signals in Online Innovation Communities", Science, Technology, and Society Seminar, Tufts University, Medford, MA, 1st February, 2019.
- "Strategic Behavior in Contests: Evidence from a Large-Scale Field Study," Open and User Innovation Conference, New York University, 6<sup>th</sup> August, 2018.
- Invited talk "Learning from Mixed Signals in Online Innovation Communities", Laboratory for Innovation Science at Harvard, Harvard University, 21st May, 2018.
- Invited talk "Optimal Experimental Design in Online Social Network Experiments," Applied & Interdisciplinary Mathematics Seminar, Department of Mathematics, Northeastern University, 7<sup>th</sup> November 2017.
- "Optimal Experimental Design in Online Social Network Experiments," CODE@MIT, Cambridge, MA, 27<sup>th</sup> October 2017.
- Invited talk "Quantifying Reputation and Success in Art," Northwestern University, Evanston, IL, 23<sup>rd</sup> October 2017.
- Invited talk "Social Network Processes in Collaborative Decision-Making," Opinion Dynamics Workshop, UT Austin, TX, 13<sup>th</sup> June, 2016.
- Invited panelist "Big Data and Financial Inclusion," Rethinking Financial Inclusion, Harvard Kennedy School, Cambridge, MA, 19<sup>th</sup> April, 2016.
- "Learning from Good vs. Bad Examples: Evidence from Creative Design Competitions"
  - o Open and User Innovation Workshop, Harvard Business School, Boston, MA, 1<sup>st</sup> August 2016.

- o Collective Intelligence, New York University, New York City, NY, 2<sup>nd</sup> June 2016.
- o Digital Innovation Workshop (invited speaker), Boston College, MA, 12<sup>th</sup> May 2016.
- o Harvard Business School (invited speaker), Digital Seminar, 6<sup>th</sup> April 2016.
- o University of Massachusetts (invited speaker), Amherst, 16<sup>th</sup> October 2015.
- o Network Science Institute, Northeastern University, opening ceremony, 4<sup>th</sup> November 2015.
- Invited panel speaker on "Peer Production Networks, International Workshop on Network Theory, Northwestern University, Evanston, 30<sup>th</sup> October, 2015.
- "Collective Problem-Solving by Heterogeneous Agents in Network Environments"
  - Workshop on Information in Networks (WIN), New York City, NY, October 1<sup>st</sup> 2015.
- "Investigating Social Influence Through Large-Scale Field Experimentation"
  - Telenor, Oslo, Norway, 12<sup>th</sup> October 2015.
  - Workshop on Information in Networks (WIN), New York City, NY, October 1<sup>st</sup> 2015.
  - NetMob, MIT Media Lab, Cambridge, MA, April 8<sup>th</sup> 2015.
- "From Crowds to Collaborators: Self-Organization and Collaboration in Online Creative Teams"
  - Google Inc., Human Computation Tech Talk, Mountain View, CA, 2014.
  - o Facebook Inc., Palo Alto, CA, 2014.
- "Crowdsourcing for a Social Good: The Impact of Incentive Preferences on Consumers' Creative Contributions to Social Innovation"
  - o NASA Center of Excellence for Collaborative Innovation, 2014
  - o 12th International Open and User Innovation Workshop, Boston, MA, 2014
- "Demystifying the impact of crowdsourcing innovation: What happens with "Not Invented Here" ideas?" symposium at AOM 2014 (TIM, OCIS, and OMT groups; with Natalia Levina, Hila Lifshitz-Assaf, and Jeffrey Nickerson)
- Panel discussion on "Big Data", Northeastern University, 2013.
- "Multidimensional Networks in Crowdsourced Creative Collaboration"
  - Workshop on Information in Networks (WIN), 2013, Stern School of Business, NYU
- "Crowd Sourcing and Collective Intelligence: Engaging Large Groups for Problem Solving and Decision Making"
  - o Invited talk: Social Personality Area Meeting, Department of Psychology, Northeastern University, 2013
  - Center for Complex Network Research, Northeastern University, Boston, MA, 2013
- "The Benefits of Product Quality Disagreement When Divergent Reviews Drive Online Word of Mouth"
  - Harvard Business School, Boston, MA, 2013
- "A Bias for 'Normal' Science? Field Evidence from Medical Research Funding Proposal Evaluations"
  - Harvard University, Science of Success Symposium, Cambridge, MA, 2013.
  - o Stern School of Business, New York University, 2013
  - o National University of Singapore, Singapore, 2013
  - o IESE Business School, Barcelona, Spain, 2013
  - o School of Information, University of Washington, Seattle, WA, 2013
  - College of Information Studies, University of Maryland, College Park, MD, 2013
  - o Zicklin School of Business, Baruch College, City University of New York, 2013
  - o Howe School of Business, Stevens Institute of Technology, Hoboken, NJ, 2013
  - o REER, Georgia Tech, Atlanta, GA, 2012
  - o 10th International Open and User Innovation Workshop, Boston, MA, 2012
- "From Crowds to Collaborators: Initiating Effort & Sustaining Collaboration Among Online Creative Workers"
  - o NASA Center of Excellence for Collaborative Innovation, 2014
  - o Harvard Business School, Boston, MA, 2013 (with Anita Woolley)
  - o Quality Information in Organizations and Society, SIG Information Quality, Milan, Italy, 2013
  - o Technische Universität München, 2012
  - o Universität Hamburg, 2012
- "Peer Influence on Individual Opinions in Information Networks"
  - Workshop on Information in Networks (WIN), Stern School of Business, NYU, 2012

• Research visit at London Business School, July 2012

- "Tool-Supported Innovation Management in Service Ecosystems," Universität Kassel, 2011
- Invited keynote speaker: "Towards a Cloud Computing Value Network", 40. Annual Meeting of the Association for Informatics (GI Jahrestagung), 2010
- Radio interview Deutschlandradio E-Welten Topic: Semantic Web 2010
- Research visit: ISS International Business School of Service Management, Hamburg, Germany, Feb. 2010
- System demonstration and presentation on "Service Innovation" at the International THESEUS Symposium, Federal Ministry of Economics and Technology (BMWi), Berlin, Germany, 2009
- "Quality Management in Service Ecosystems," Queensland University of Technology, Brisbane, Australia 2007