

**Jana Diesner**  
**Curriculum Vitae**

Associate Professor, School of Information Sciences, University of Illinois Urbana Champaign (UIUC)  
Email: [jdiesner@illinois.edu](mailto:jdiesner@illinois.edu), Web: <http://jdiesnerlab.ischool.illinois.edu>

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**RESEARCH AREAS**

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- Social Computing, Computational Social Science, Human-Centered Data Science and AI
  - Responsible Computing (Governance, Biases, Ethics)
  - Network Analysis, Natural Language Processing, Machine Learning
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**APPOINTMENTS**

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**University of Illinois at Urbana-Champaign (UIUC)**

- Associate Professor, School of Information Sciences since 08/2018
- Assistant Professor, School of Information Sciences 2012-2018

Additional appointments at UIUC:

- Human-Centered Data Science & AI Theme Lead, Center for Informatics since 2022  
Research in Science and Scholarship (CIRSS)
  - Director of Strategic Initiatives/ Data Science, School of Information Sciences 2019-2021
  - Director of PhD Program, School of Information Sciences 2017-2020
  - Natural Language Processing Expert in Residence at Champaign Research Park since 2018
  - Faculty Affiliate (current): Department of Computer Science, Illinois Informatics Institute, Information Trust Institute
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**EDUCATION**

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**Carnegie Mellon University, School of Computer Science, Pittsburgh, PA**

**Ph.D. Computation, Organizations and Society (now Societal Computing)** 2012  
Committee: Kathleen Carley, Carolyn Rose, William Cohen, Jeffrey Johnson

**M.S. Computation, Organizations and Society (now Societal Computing)** 2007

**Dresden University of Technology, Dresden, Germany**

**M.A. (Magister Artium), Communication Science** 2003

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**SELECTED HONORS, AWARDS, FELLOWSHIPS (paper awards under Publications)**

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- Leadership Academy Fellow for underrepresented leaders in STEM higher education, awarded by National Alliance for Inclusive & Diverse STEM Faculty (ASPIRE) 2020
  - CIO Scholar for Information Research & Technology, UIUC 2018
  - RC Evans Data Analytics Fellowship, awarded by Deloitte Foundation Center for Business Analytics, UIUC 2018
  - Linowes Fellowship, awarded by Cline Center for Advanced Social Research, UIUC 2018
  - Dori J. Maynard Senior fellow, awarded by Center for Investigative Reporting and Robert C. Maynard Institute for Journalism Education 2016
  - Faculty Fellowship, awarded by National Center for Supercomputing Applications 2015
  - Siebel Scholarship, awarded annually for academic excellence and demonstrated leadership to 80 top students from the world's leading graduate schools (\$35,000) 2011
  - Gelfand Student Award for Educational Outreach and Service Learning, awarded by Carnegie Mellon University 2010
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**PREVIOUS APPOINTMENTS**

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**Carnegie Mellon University, School of Computer Science**

Software Developer and Research Associate 06/2003-08/2006

**Carnegie Mellon University, Institute for Complex Engineered Systems**

Research Scholar 2000-2002

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## FUNDING

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**Summary: \$1,424,875 as single PI, \$26,436,788 as Co-PI (own share: \$553,609), \$277,400 as subawardee**

**1. Data Bias Assessment**

- Principal Investigator: Stephen Downie, Co-PIs: Jana Diesner, Bertram Ludaescher, Mike Twidale, Madelyn Sanfilippo
- Funder: Acxiom
- Period: 08/2021-02/2022
- Total: \$202,046

**2. Health Data Literacy Ambassadors**

- Principal Investigator: Rachel Magee, Co-PIs: Catherine Blake, Jana Diesner
- Agency: University of Illinois Extension
- Period: 2020-2022
- Total: \$59,742

**3. TextTransfer – Main Project: Assessing Impact Patterns in Research Texts Applying Corpus Driven Methods (Subproject: Implementation and Practice in Linguistic Use Cases)**

- Principal Investigator: Dr. Andreas Witt (IDS), UIUC PI: Jana Diesner
- Agency: Federal Ministry of Education and Research (Germany) and Institute for German Language (IDS) (Germany)
- Period: 06/2020-05/2023
- Total: \$1,052,100 (Diesner: \$164,733)

**4. Reliable Extraction of Emergency Response Networks from Text Data and Benchmarking with National Emergency Response Guidelines**

- Principal Investigator: Jana Diesner
- Agency: Department of Homeland Security and Critical Infrastructure Resilience Institute
- Period: 2019-2020
- Total: \$200,000

**5. Conservation Legacies: Understanding the Long-term Impacts of Private Foundation Investment in International Biodiversity Conservation**

- Principal Investigators: Daniel Miller (UIUC) and Jana Diesner (UIUC, in this role since 2021), Co-PIs: Jeremy Brooks (Ohio State University), Aili Pyhälä (University of Helsinki), Sonam Wang (Bhutan Institute for Himalayan Studies)
- Agency: MacArthur Foundation
- Period: 2019-2021
- Total: \$550,000 (Diesner: \$54,486)

**6. Review and Assessment of the Usage of Computational Methods for Humanitarian Assistance and Disaster Relief (HADR) Efforts, and Scalable Measurement of Emergency Response from Text Data**

- Principal Investigator: Jana Diesner
- Agency: Department of Homeland Security and Critical Infrastructure Resilience Institute
- Period: 12/2017-09/2018
- Total: \$100,000

**7. Alliance for Internet of Battlefield Things (IoBT) Research on Evolving Intelligent Goal-driven Networks (REIGN)**

- Principal Investigator: Tarek Abdelzaher
- Co-PIs at UIUC: Tamer Basar, Jana Diesner, Nitin Vaidya, Venugopal Veeravalli
- Agency: U.S. Army Research Laboratory (ARL)
- Period: 09/2017-09/2022
- Total: \$25,600,000 (Diesner: about \$407,365)

- 8. TextTransfer – Corpus-based detection of secondary practical usage of scientific publications**
  - Principal Investigator: Dr. Andreas Witt (IDS), R&D PI: Jana Diesner
  - Agency: Federal Ministry of Education and Research (Germany) and Institute for German Language (IDS) (Germany)
  - Period: 06/2017-12/2019
  - Total: \$597,844 (Diesner: \$112,667)
- 9. Academia-Industry Big Data Collaboration for Early Career Researchers program: Developing organizational expertise and resources for the responsible conduct of research with human generated and publicly available data**
  - Project Leader: Jana Diesner
  - Agency: Midwest Big Data Hub & Computing Community Consortium
  - Period: 2016
  - Total: \$5,000
- 10. Computational impact assessment of issue focused media and information products**
  - Principal Investigator: Jana Diesner
  - Agency: FORD Foundation, grant #0155-0370
  - Period: 04/2015-09/2016
  - Total: \$150,000
- 11. Computational impact assessment of social justice documentaries and media**
  - Principal Investigator: Jana Diesner
  - Agency: FORD Foundation, grant #0145-0558
  - Period: 04/2014-09/2015
  - Total: \$150,000
- 12. Impact assessment of social justice documentaries**
  - Principal Investigator: Jana Diesner
  - Agency: FORD Foundation, grant #0125-6162
  - Period: 11/2012-02/2014
  - Total: \$150,000
- 13. Predictive modeling for detection and classification of medical entities and facts**
  - Principal Investigator: Jana Diesner
  - Agency: IMO (Intelligent Medical Objects), grant #2014-04797-00-00
  - Period: 05/2015-12/2017
  - Total: \$300,000
- 14. Computational expansion of controlled medical vocabulary and identification of organizational social media footprint**
  - Principal Investigator: Jana Diesner
  - Agency: IMO (Intelligent Medical Objects), grant #2013-05716-00-00
  - Period: 06/2013 - 12/2013
  - Total: \$38,900
- 15. Predictive modeling for impact assessment**
  - Principal Investigator: Jana Diesner
  - Agency: NCSA (National Center for Supercomputing Applications) Faculty Fellowship
  - Period: 08/2015-07/2016
  - Total: \$23,000
- 16. Analysis of academic activity patterns in academic literature**
  - Principal Investigator: Jana Diesner; Co-PI: Vetle Torvik
  - Agency: KISTI (Korea Institute of Science and Technology Information)
  - Period: 07/2017-11/2017
  - Total: \$25,000

**17. Selection and Influence: Identification of link formation mechanisms in scientific collaboration networks**

- Principal Investigator: Jana Diesner
- Agency: KISTI (Korea Institute of Science and Technology Information)
- Period: 05/2016-11/2016
- Total: \$33,000

**18. Modeling of nation-scale scientific collaboration networks and impact of entity disambiguation on big network data**

- Principal Investigator: Jana Diesner
- Agency: KISTI (Korea Institute of Science and Technology Information), grant C3240
- Period: 04/2015-09/2015
- Total: \$50,000

**19. Research on the authority data based scientist network analysis modeling**

- Principal Investigator: Jana Diesner
- Agency: KISTI (Korea Institute of Science and Technology Information), grant P14033
- Period: 03/2014-09/2014
- Total: \$47,475

**20. Socio-technical data analytics for improving impact and impact assessment**

- Principal Investigator: Jana Diesner
- Agency: Anheuser Busch, grant #2014-04922
- Period: 05/2014 – 09/2015
- Total: \$125,000

**21. Evaluation of the performance and usability of the ConText technology**

- Principal Investigator: Jana Diesner
- Agency: Center for Investigative Reporting
- Period: 2013-2014
- Total: \$7,500

**22. Developing an entity extractor for the scalable construction of semantically rich socio-technical network data**

- Principal Investigator: Jana Diesner, Co-PI: Brent Fegley
- Agency: Start-up allocation award from Extreme Science and Engineering Discovery Environment (XSEDE)
- Period: 2013
- Total: 30,000 service units + personnel support from Pittsburgh supercomputing center
- Amount of effort: 50%

**23. Other Gifts and Contracts**

- Principal Investigator: Jana Diesner
- Organizations: Connected Action, Peace is Loud, Shoot First, Inc., Picture Motion, VM People, Robert Stone Productions, Social Media Research Foundation
- Period: 2013-2016
- Total: \$45,000

**Non-funded roles on grants**

**24. BD Hubs: Midwest Big Data Hub: Building Communities to Harness the Data Revolution**

- Principal Investigators: William Gropp, Co-PI: Catherine Blake, Elif Ertekin (all UIUC)
- Agency: National Science Foundation
- Role Diesner: Senior Personnel
- Period: 06/2019-05/2023
- Total: \$ 2,883,274 (UIUC), share Diesner: \$0

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**PUBLICATIONS (student advisees underlined)**

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**Summary: peer-reviewed publications: 100+, h-index: 24, i10-index: 57**

**Papers in Peer Reviewed Journal**

- J23 Aref, S., Dinh, L., Rezapour, R., & **Diesner, J.** (2020). Multilevel structural evaluation of signed directed social networks based on balance theory. *Scientific Reports*, 10, 15228. doi: 10.1038/s41598-020-71838-6 (Impact Factor 3.99)
- J22 Parulian, N., Lu, T., Mishra, S., Avram, M., & **Diesner, J.** (2020). Effectiveness of the execution and prevention of metric-based adversarial attacks on social network data. *Information*, 11(6), 306. doi: 10.3390/info11060306 (Impact Factor 1.98)
- J21 Hilbert, M., Barnett, G., Blumenstock, J., Contractor, N., **Diesner, J.**, Frey, S., Gonzales-Bailon, S., Lamberson, P.J., Pan, J., Peng, T.-Q., Shen, C., Smaldino, P.E., van Atteveldt, W., Waldherr, A., Zhan, J., Zhu, J.J.H. (2019). Computational communication science: A methodological catalyzer for a maturing discipline. *International Journal of Communication*, 13(2019), 3912-3934 (Impact Factor 1.28)
- J20 Kim, J., & **Diesner, J.** (2019). Formational bounds of link prediction in collaboration networks. *Scientometrics*, 1-20. doi: 10.1007/s11192-019-03055-6 (Impact Factor 2.77)
- J19 Mishra, S., Fegley, B.D., **Diesner, J.**, & Torvik, V.I. (2018). Self-citation is the hallmark of productive authors, of any gender. *PLoS ONE*, 13(9): e0195773. doi: 10.1371/journal.pone.0195773 (Impact Factor 2.74)
- J18 Abdelzaher T., Ayanian N., Basar T., **Diesner J.**, Diggavi S., Ganesan D., Govindan R., Jha S., Lepoint T., Marlin B., Nahrstedt K., Nicol D., Rajkumar R., Russell S., Seshia S., Sha F., Shenoy P., Srivastava M., Sukhatme G., Swami A., Tabuada P., Towsley D., Vaidya N., & Veeravalli V. (2018). Toward an Internet of Battlefield Things: A resilience perspective. *IEEE Computer* 51(11), 24-36. doi: 10.1109/MC.2018.2876048 (Impact Factor 3.56)
- J17 Kim, J., & **Diesner, J.** (2017). Over-time measurement of triadic closure in coauthorship networks. *Social Network Analysis and Mining (SNAM)*, 7(9). doi:10.1007/s13278-017-0428-3 (Impact Factor 3.87)
- J16 Kim, J., Tao L., Lee, S.H., & **Diesner, J.** (2016). Evolution and structure of scientific co-publishing network in Korea during 1948-2011. *Scientometrics*, 107(1):27-41. doi:10.1007/s11192-016-1878-5 (IF 2.147) (Impact Factor 2.77)
- J15 Kim, J., & **Diesner, J.** (2015). Distortive effects of initial-based name disambiguation on measurements of large-scale coauthorship networks. *Journal of the Association for Information Science and Technology (JASIST)*, 67(6), 1446-1461. doi: 10.1002/asi.23489 (IF 2.83)
- J14 **Diesner, J.** (2015) Small decisions with big impact on data analytics. *Big Data & Society, special issue on Assumptions of Sociality*, 2(2). doi: 10.1177/2053951715617185 (Impact Factor 4.57)
- J13 Kim, J., & **Diesner, J.** (2015). The effect of data pre-processing on understanding the evolution of collaboration networks. *Journal of Informetrics*, 9(1), 226-236. doi: 10.1016/j.joi.2015.01.002 (IF 4.29)
- J12 Kim, J., & **Diesner, J.** (2015). Coauthorship networks: A directed network approach considering the order and number of coauthors. *Journal of the Association for Information Science and Technology (JASIS&T)*, 66(12), 2685-2696. doi: 10.1002/asi.23361 (IF 2.83)
- J11 **Diesner, J.**, Kim, J., & Pak, S. (2014). Computational impact assessment of social justice documentaries. *Journal of Electronic Publishing (JEP), special issue Metrics for Measuring Publishing Value: Alternative and Otherwise*, 17(3). doi: 10.3998/3336451.0017.306 (invited paper) (IF 0.07)

- J10 Kim, J., Kim, H., & **Diesner, J.** (2014). The impact of name ambiguity on coauthorship network measurements. *Journal of Information Science Theory and Practice*, 2(2), 6-15. doi: 10.1633/JISTaP.2014.2.2.1 (IF 0.55)
- J9 Kim, J., & **Diesner, J.** (2014). A network-based approach to coauthorship credit allocation. *Scientometrics*, 101(1), 587-602. doi: 10.1007/s11192-014-1253-3 (IF 2.77)
- J8 **Diesner, J.** (2013). From Texts to Networks: Detecting and managing the impact of methodological choices for extracting network data from text data. *Kuenstliche Intelligenz Journal of Artificial Intelligence*, 27(1), 75-78. doi: 10.1007/s13218-012-0225-0 (invited paper)
- J7 van Holt, T., Johnson, J.C., Carley, K.M., Brinkley, J., & **Diesner, J.** (2013). Rapid ethnographic assessment for cultural mapping. *Poetics*, 41(4), 366-383. doi: 10.1016/j.poetic.2013.05.004 (IF 1.29)
- J6 **Diesner, J.**, Carley, K.M., & Tambayong, L. (2012). Mapping socio-cultural networks of Sudan from open-source, large-scale text data. *Computational and Mathematical Organization Theory*, 18(3), 328-339. doi: 10.1007/s10588-012-9126-x (IF 1.55)
- J5 Chang Y., **Diesner, J.**, & Carley, K.M. (2012). Towards automated definition acquisition from operations law. *IEEE Transactions on Systems, Man, and Cybernetics, Part C*, 42(2), 223-232. doi: 10.1109/TSMCC.2011.2110643 (IF 2.17)
- J4 Dabbish, L., Towne, B., **Diesner, J.**, & Herbsleb, J. (2011). Construction of association networks from communication in teams working on complex projects. *Statistical Analysis and Data Mining (SAM), Special Issue: Networks*, 4(5), 547-563. doi: 10.1002/sam.10135 (IF 1.39)
- J3 **Diesner, J.**, & Carley, K.M. (2008). Conditional random fields for entity extraction and ontological text coding. *Computational and Mathematical Organization Theory*, 14(3), 248-262. doi: 10.1007/s10588-008-9029-z (IF 1.55)
- J2 Carley, K.M., **Diesner, J.**, Reminga, J., & Tsvetovat, M. (2007). Toward an interoperable dynamic network analysis toolkit. *Decision Support Systems (DSS), Special Issue: Cyberinfrastructure for Homeland Security: Advances in Information Sharing, Data Mining, and Collaboration Systems*, 43(4), 1324-1347. doi: 10.1016/j.dss.2006.04.003 (F 4.72)
- J1 **Diesner, J.**, Frantz, T., & Carley, K.M. (2005). Communication networks from the Enron email corpus "It's always about the people Enron is no different". *Computational and Mathematical Organization Theory*, 11(3), 201-228. doi: 10.1007/s10588-005-5377-0 (IF 1.55)

#### Peer Reviewed Conference (full papers unless noted otherwise)

- C36 Rezapour, S., Dinh, L., & **Diesner, J.** (2021): Incorporating the Measurement of Moral Foundations Theory in Analyzing Stances on Controversial Topics. Proceedings of 32<sup>nd</sup> ACM Conference on Hypertext and Social Media (HT) (held online).
- C35 Yubin, G., Dinh, L., Liu, X., Su, J., Lu, Z., Wang, A., & **Diesner, J.** (2021). BACO: A Background Knowledge- and Content-based Framework for Citing Sentence Generation. Proceedings of Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (ACL-IJCNLP 2021) (held online).
- C34 Sarol, J., Dinh, L., & **Diesner, J.** (2021). Variation in Situational Awareness Information due to Selection of Data Source, Summarization Method, and Method Implementation. Proceedings of International AAAI Conference on Web and Social Media (ICWSM) (held online).
- C33 Sarol, J., Dinh, L., Rezapour, R., Chin, C., Yang, P., & **Diesner, J.** (2020). An Empirical Methodology for Detecting and Prioritizing Needs during Crisis Events. Findings of ACL: Conference on Empirical Methods in Natural Language (EMNLP) (held online) (acceptance rate 38%). doi: 10.18653/v1/2020.findings-emnlp.366

- C32 Jiang, L., Dinh, L., Rezapour, R., & Diesner, J. (2020). Which groups do you belong to? Sentiment-based PageRank to measure formal and informal influence in social networks. Proceedings of *9th International Conference on Complex Networks and their Applications (COMPLEX NETWORKS)* (held online). doi: 10.1007/978-3-030-65351-4\_50
- C31 Rezapour, R., Diesner, J., Bopp, J., Fiedler, N., Steffen, D., Witt A. (2020). Beyond citation: corpus-based methods for assessing the impact of research outcomes on society. Proceedings of *12th International Conference on Language Resources and Evaluation (LREC)* (acceptance rate 56%).
- C30 Jiang, M., Huang, Q., Wang, X., Zhang, L., Zhang, P., Gan, Z., Diesner, J., Gao, J. (2019). TIGER: Text-to-Image Grounding for image caption Evaluation. Proceedings of *Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, Hong Kong. doi: 10.18653/v1/D19-1220 (acceptance rate 23.8%)
- C29 Jiang, M., Hu, J., Huang, Q., Zhang, L., Diesner, J., Gao, J. (2019). REO-Relevance, Extraneous, Omission: A fine-grained evaluation for image captioning. Proceedings of *Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, Hong Kong. doi: 10.18653/v1/D19-1156 (acceptance rate 23.8%)
- C28 Rezapour, R., Ferronato, P., & Diesner, J. (2019). How do moral values differ in tweets on social movements? Poster in Proceedings of *22nd ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, Austin, Texas. doi: 10.1145/3311957.3359496
- C27 Addawood, A., Balakumar, P., Diesner, J. (2019). Categorization and comparison of influential Twitter users and sources referenced in tweets for two health-related topics. *iConference*. Washington, DC. doi: 10.1007/978-3-030-15742-5\_60
- C26 Addawood, A., Alshamrani, A., Alqahtani, A., Diesner, J., & Broniatowski, D. (2018). Women's driving in Saudi Arabia – Analyzing the discussion of a controversial topic on Twitter. Short paper in *International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS)*, Washington, DC.
- C25 Abdelzaher, T., Ayanian, N., Basar, T., Diggavi, S., Diesner, J., Ganesan, D., Govindan, R., Jha, S., Lepoint, T., Marlin, B., Nahrstedt, K., Nicol, D., Rajkumar, R., Russell, S., Seshia, S., Sha, F., Shenoy, P., Srivastava, M., Sukhatme, G., Swami, A., Tabuada, P., Towsley, D., Vaidya, N., & Veeravalli, V. (2018). Will distributed computing revolutionize peace? The emergence of battlefield IoT. Proceedings of *38th IEEE International Conference on Distributed Computing (ICDCS)*, Vienna, Austria. doi: 10.1109/ICDCS.2018.00112
- C24 Mishra, S., & Diesner J. (2018). Detecting the correlation between sentiment and user-level and text-level meta-data from benchmark corpora. Proceedings of *29th ACM Conference on Hypertext and Social Media (HT)*, Baltimore, MD. doi: 10.1145/3209542.3209562 (Acceptance rate 29%)
- C23 Rezapour, R., & Diesner, J. (2017). Classification and detection of micro-level impact of issue-focused films based on reviews. Proceedings of *20th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, (pp. 1419-1431), Portland, OR. doi: 10.1145/2998181.2998201
- C22 Rezapour, R., Wang, L., Abdar, O., & Diesner, J. (2017). Identifying the overlap between election result and candidates' ranking based on hashtag-enhanced, lexicon-based sentiment analysis. Proceedings of *IEEE 11th International Conference on Semantic Computing (ICSC)*, (pp. 93-96), San Diego, CA. doi: 10.1109/ICSC.2017.92

- C21 Jiang, M., & **Diesner, J.** (2016). Says Who...? Identification of critic versus layman reviews of documentary films. Proceedings of *26th International Conference on Computational Linguistics (COLING)*, (pp. 2122-2132), Osaka, Japan.
- C20 Jiang, M., & **Diesner, J.** (2016). Issue-focused documentaries versus other films: rating and type prediction based on user-authored reviews. Proceedings of *ACM Hypertext and Social Media*, (pp. 225-230), Halifax, Canada. doi: 10.1145/2914586.2914638
- C19 **Diesner, J.**, Rezapour, R., & Jiang, M. (2016). Assessing public awareness of social justice documentary films based on news coverage versus social media. *iConference*. Philadelphia, USA. (Acceptance rate 32%)
- C18 **Diesner, J.**, & Evans, C. (2015). Little bad concerns: Using sentiment analysis to assess structural balance in communication networks. Proceedings of *IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*. Paris, France. doi: 10.1145/2808797.2809403 (Acceptance rate 13%)
- C17 Mishra, S., & **Diesner J.** (2015). Sentiment analysis with incremental human-in-the-loop learning and lexical resource customization. Proceedings of *ACM Hypertext and Social Media*, (pp. 323-325), Cyprus. doi: 10.1145/2700171.2791022 (Acceptance rate 40%)
- C16 **Diesner, J.**, & Rezapour, R. (2015). Social computing for impact assessment of social change projects. In *International Conference on Social Computing, Behavioral Modeling and Prediction (SBP 2015)*. Washington, DC. doi: 10.1007/978-3-319-16268-3\_4 (Acceptance rate 25%)
- C15 Al-Sabbagh, R., Girju, R., & **Diesner, J.** (2015). A unified framework to identify and extract uncertainty cues, holders, and scopes in one fell-swoop. In: A. Gelbukh (Ed.) In *International Conference on Intelligent Text Processing and Computational Linguistics*, (pp. 310-334). Springer, Cham. doi: 10.1007/978-3-319-18111-0\_24 (Acceptance rate 28.9%)
- C14 **Diesner, J.**, Evans, C., & Kim, J. (2015). Impact of entity disambiguation errors on social network properties. Proceedings of *International AAAI Conference on Web and Social Media (ICWSM)*, Oxford, UK. (Acceptance rate 20%)
- C13 Mishra, S., Phelps, K., Agarwal, S., Picco, J., Guo, J., & **Diesner, J.** (2014). Enthusiasm and support: Alternative sentiment classification for social movements on social media. *ACM Conference on Web Science*. Bloomington, IN. doi: 10.1145/2615569.2615667
- C12 Counts, S., De Choudhury, M., **Diesner, J.**, Gilbert, E., Gonzalez, M., Keegan, B., Naaman, M., & Wallach, H. (2014). Computational social science: CSCW in the social media era. Proceedings of *17th ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW)*, (pp. 105-108). Baltimore, MD. doi: 10.1145/2556420.2556849 (Acceptance rate 27%)
- C11 **Diesner, J.**, Pak, S., Kim, J., Soltani, K., & Aleyasen, A. (2014). Computational assessment of the impact of social justice documentaries. *iConference*, Berlin, Germany. doi: 10.9776/14125 (Acceptance rate 32%)
- C10 Al-Sabbagh, R., Girju, R., & **Diesner, J.** (2014). 3arif: A corpus of modern standard and Egyptian Arabic tweets annotated for epistemic modality using interactive crowdsourcing. Proceedings of *25th Conference on Computational Linguistics (COLING 2014)*, (pp. 1521-1532). Dublin, Ireland. (Acceptance rate 14%)
- C9 Al-Sabbagh, R., **Diesner, J.**, & Girju, R. (2013). Using the semantic-syntactic interface for reliable Arabic modality annotation. Proceedings of *6th International Joint Conference on Natural Language Processing (IJCNLP 2013)*, (pp. 410-418). Nagoya, Japan. (Acceptance rate 20%)



- C8 Efron, M., **Diesner, J.**, Organisciak, P., Sherman, G., & Lucic, A. (2012). The University of Illinois' Graduate School of Library and Information Science at TREC 2012. Proceedings of *Text REtrieval Conference (TREC)*. Gaithersburg, ML.
- C7 **Diesner, J.**, & Carley, K.M. (2009). He says, she says. Pat says, Tricia says. How much reference resolution matters for entity extraction, relation extraction, and social network analysis? Proceedings of *IEEE Symposium on Computational Intelligence for Security and Defense Applications (CISDA)*, (pp. 1-8). Ottawa, Canada.
- C6 Landwehr, P., **Diesner, J.**, & Carley, K.M. (2009). Words of Warcraft: a relational text analysis of quests in an MMORPG. Proceedings of *Digital Games Research Association Conference (DiGRA)*. London, UK.
- C5 **Diesner, J.**, & Carley, K.M. (2007). Conditional random fields for entity extraction and ontological text coding. *North American Association for Computational Social and Organizational Science Conference (NAACSOS)*, Atlanta, GA. DOI: 10.1007/s10588-008-9029-z \***Best Student Paper Award**
- C4 Lecy, J., **Diesner, J.**, & Carley, K.M. (2006). Identification of knowledge groups from the Enron Email corpus. Proceedings of *56th Annual Conference of International Communication Association (ICA)*. Dresden, Germany. (Acceptance rate 11%)
- C3 **Diesner, J.**, Kumaraguru, P., & Carley, K.M. (2005). Mental models of data privacy and security extracted from interviews with Indians. Proceedings of *55th Annual Conference of International Communication Association (ICA)*. New York, NY. (Acceptance rate 45%)
- C2 **Diesner, J.**, Carley, K.M. (2004). Using network text analysis to detect the organizational structure of covert networks. Proceedings of *North American Association for Computational Social and Organizational Science Conference (NAACSOS)*. Pittsburgh, PA.
- C1 Carley, K.M., **Diesner, J.**, Reminga, J., & Tsvetovat, M. (2004). An integrated approach to the collection and analysis of network data. *North American Association for Computational Social and Organizational Science Conference (NAACSOS)*. Pittsburgh, PA.

#### Peer Reviewed Workshops/ Symposia (full or short papers unless noted otherwise)

- S22 Han, K., Rezapour, R., Nakamura, K.S., Devkota, D., Miller, D.C., & **Diesner, J.** (2020). Domain-knowledge-based classification of biodiversity conservation actions based on project reports. In Proceedings of METRICS 2020: Workshop on Informetrics and Scientometrics Research, at *Association for Information Science & Technology (ASIS&T)* (held online).
- S21 Han, K., Yang, P., Mishra, S., & **Diesner, J.** (2020). WikiCSSH: Extracting Computer Science Subject Headings from Wikipedia. In Proceedings of Scientific Knowledge Graphs Workshop co-located with *24th International Conference on Theory and Practice of Digital Libraries (TPDL)* (held online).
- S20 Jiang, M., & **Diesner, J.** (2019). A constituency parsing tree based method for relation extraction from abstracts of scholarly publications. In Proceedings of 13<sup>th</sup> Workshop on Graph-Based Methods for Natural Language Processing (TextGraphs-13) at *Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, Hong Kong. doi: 10.18653/v1/D19-5323
- S19 Mishra, S., & **Diesner, J.** (2019). Capturing signals of enthusiasm and support towards social issues from Twitter. In Proceedings of 5th International Workshop on Social Media World Sensors (SIDEWayS'19) at *ACM Hypertext*, Hof, Germany. doi: 10.1145/3345645.3351104
- S18 Avram, M. V., Mishra, S., Parulian, N. N., & **Diesner, J.** (2019). Adversarial perturbations to manipulate the perception of power and influence in networks. In Proceedings of Workshop on

Social Influence at *International Conference on Advances in Social Networks Analysis and Mining* (ASONAM), Vancouver, BC, Canada. doi: 10.1145/3341161.3345026

- S17 Rezapour, R., Shah, S., & Diesner, J. (2019) Enhancing the measurement of social effects by capturing morality. Proceedings of the 10th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA). *Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, Minneapolis, MN.
- S16 Mishra, S., Fegley, B.D., Diesner, J., & Torvik, V. (2018). Expertise as an aspect of author contributions. In METRICS 2018: Workshop on Informetrics and Scientometrics Research, at *Association for Information Science & Technology (ASIS&T)*, Vancouver, Canada. \***Best Student Paper Award**
- S15 Witt, A., **Diesner, J.**, Steffen, D., Rezapour, R., Bopp, J., Fiedler, N., Köller, C., Raster, M., & Wockenfuß, J. (2018). Impact of scientific research beyond academia: An alternative classification schema. Proceedings of 1<sup>st</sup> Workshop on Computational Impact Detection from Text Data, *11<sup>th</sup> Language Resources and Evaluation Conference (LREC 2018)*, Miyazaki, Japan.
- S14 Rai, A., Minsker, B., Diesner, J., Karahalios, K., & Sun, Y. (2018). Identification of landscape preferences by using social media analysis. Proceedings of the 3rd International Workshop on Social Sensing, *ACM/IEEE International Conference on Internet of Things Design and Implementation 2018 (IoTDI 2018)*, Orlando, FL.
- S13 Addawood, A., Rezapour, R., Abdar, O., & Diesner, J. (2017). Telling apart tweets associated with controversial versus non-controversial topics. Proceedings of 2<sup>nd</sup> Workshop on NLP and Computational Social Science (NLP+CSS), *55th Annual Meeting of the Association for Computational Linguistics (ACL)* (pp. 32-41). Vancouver, Canada.
- S12 Mishra, S., & Diesner, J. (2016). Semi-supervised named entity recognition in noisy-text. 2nd Workshop on Noisy User-generated Text (W-NUT), *26th International Conference on Computational Linguistics (COLING)*, Osaka, Japan.
- S11 **Diesner, J.**, & Chin, C. (2016). Seeing the forest for the trees: Understanding and implementing regulations for the collection and analysis of human centered data. Human-Centered Data Science (HCDS) Workshop, *19th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2016)*, San Francisco, CA.
- S10 **Diesner, J.**, & Chin, C. (2016). Gratis, libre, or something else? Regulations and misassumptions related to working with publicly available text data. ETHI-CA<sup>2</sup> Workshop (ETHics in Corpus Collection, Annotation & Application), *10th Language Resources and Evaluation Conference (LREC)*, Portoroz, Slovenia.
- S9 **Diesner, J.**, & Chin, C. (2015). Usable Ethics: Practical considerations for responsibly conducting research with social trace data. *Workshop: Beyond IRBs: Ethical Review Processes for Big Data Research*, Future of Privacy Forum, Washington DC.
- S8 Kim, J., Aleyasen, A., Kim, H., Kim, H.M., & Diesner, J. (2014). Why name ambiguity resolution matters for scholarly big data research. International Workshop on Challenges & Issues on Scholarly Big Data Discovery and Collaboration, *IEEE BigData*, Washington DC. doi: 10.1109/BigData.2014.7004345.
- S7 **Diesner, J., Aleyasen, A., Mishra, S., Schechter, A., & Contractor N.S.** (2014). Comparison of communication networks built from explicit and implicit data. Computational Approaches to Social Modeling (ChASM 2014), *ACM WebScience Conference*, Bloomington, IN.

- S6 Al-Sabbagh, R., Girju, R., & **Diesner, J.** (2014). Interactive annotation for event modality in modern standard and Egyptian Arabic tweets. 8th Linguistic Annotation Workshop (LAW VIII 2014), *25th Conference on Computational Linguistics (COLING 2014)*, (pp. 139-148), Dublin, Ireland.
- S5 Al-Sabbagh, R., Girju, R., & **Diesner, J.** (2014). Unsupervised construction of a lexicon and a pattern repository of arabic modal multiword expressions. 10th Workshop on Multiword Expressions (MWE 2014), *14th Conference of the European Chapter of the Association for Computational Linguistics (EACL)*, Gothenburg, Sweden.
- S4 **Diesner, J.**, & Carley, K.M. (2012). Impact of relation extraction methods from text data on network data and analysis results. Words and Networks Workshop (WON), *ACM Web Science Conference*, Evanston, IL.
- S3 Ahmed, S., & **Diesner, J.** (2012). Information network analysis to understand the evolution of online social networking sites in the context of India, Pakistan, and Bangladesh. Words and Networks Workshop (WON), *ACM Web Science Conference*, Evanston, IL.
- S2 **Diesner, J.**, & Carley, K.M. (2010). A methodology for integrating network theory and topic modeling and its application to innovation diffusion. Workshop on Finding Synergies Between Texts and Networks, *IEEE International Conference on Social Computing*, (pp. 687-692), Minneapolis, MN. doi: 10.1109/SocialCom.2010.106 **\*Best Workshop Paper Award**
- S1 **Diesner, J.**, & Carley, K.M. (2005). Exploration of communication networks from the Enron Email corpus. Workshop on Link Analysis, Counterterrorism and Security, *Society for Industrial and Applied Mathematics (SIAM) International Conference on Data Mining*, pg. 3-14, Newport Beach, CA.

#### Peer Reviewed Extended Abstracts

- E24 Yang P., Sarol, J., Dinh, L., & **Diesner, J.** (2021). Reliable relation extraction for social network construction. Presentation at the *North American Regional Social Networks Conference 2021 (NASN2021)* (held online).
- E23 Aref, S., Dinh, L., Rezapour, R., & **Diesner, J.** (2020). Multilevel structural evaluation of signed directed social networks. Extended abstract *Network Science Society Conference 2020 (NetSci2020)* (held online).
- E22 Mishra, S., Han, K., Yang, P., Li, K., & **Diesner, J.** (2020). Human-in-the-loop construction of a knowledge base for computer science through Wikipedia. Presentation at *6th Annual International Conference on Computational Social Science (IC2S2)* (held online).
- E21 Parulian, N., Lu, T., Mishra, S., Avram, M., & **Diesner, J.** (2020). Adversarial perturbations to manipulate the perception of power and influence in networks. Poster at *6th Annual International Conference on Computational Social Science (IC2S2)* (held online).
- E20 Rezapour, R., Park, J., & **Diesner, J.** (2020). Detecting characteristics of cross-cutting language networks on social media. Poster at *6th Annual International Conference on Computational Social Science (IC2S2)* (held online).
- E19 Rezapour, R., Bopp, J., Fiedler, N., Steffen, D., Witt, A., & **Diesner, J.** (2020). Beyond citation: Corpus-based methods for assessing the impact of research outcomes on society. Poster at *6th Annual International Conference on Computational Social Science (IC2S2)* (held online).
- E18 Dinh, L., Sarol, J., & **Diesner, J.** (2020). How does situational awareness of emergencies depend on choices about data sources, analysis methods, and implementation of algorithms? Poster at *6th Annual International Conference on Computational Social Science (IC2S2)* (held online).

- E17 Dinh, L., Rezapour, R., Jiang, L., & **Diesner, J.** (2020). Assessing balance in signed digraphs by combining balance and transitivity. Poster at *6th Annual International Conference on Computational Social Science (IC2S2)* (held online) (\*Equal contribution).
- E16 Mishra, A., Rezapour, R., Park, J., & **Diesner, J.** (2020). Leveraging topic modeling to enhance the interpretability of stance detection. Poster at *6th Annual International Conference on Computational Social Science (IC2S2)* (held online).
- E15 Mishra, S., Fegley, B.D., **Diesner, J.**, & Torvik, V.I. (2019). Self-citation is the hallmark of productive authors, of any gender. Presentation at *5th Annual International Conference on Computational Social Science (IC2S2)*, Amsterdam, Netherlands.
- E14 Kim J., & **Diesner, J.** (2018) Biases in bibliometric network data and the measurement of triadic closure. *2nd European Symposium on Societal Challenges in Computational Social Science: Discrimination and Bias*, Cologne, Germany.
- E13 Mishra, S., Lee, H., Kim, J., Torvik, V., & **Diesner, J.** (2018). Construction of hierarchical subject headings for computer science and their application to studying temporal trends in scholarly literature. Poster at *4th Annual International Conference on Computational Social Science (IC2S2)*, Evanston, IL.
- E12 Dinh, L., & **Diesner, J.**, (2018). Realizing the full potential of (infra-)structures for inter-agency communication before, during, and after disasters using the example of APAN (All Partners Access Network). Proceedings of 3rd International Workshop on Social Sensing, at *ACM/IEEE International Conference on Internet of Things Design and Implementation 2018 (IoTDI 2018)*, Orlando, FL.
- E11 Addawood, A., Rezapour, R., Mishra, S., Schneider, J., **Diesner, J.** (2017). Developing an information source lexicon, Presented in Workshop on Prioritising Online Content, the *31<sup>st</sup> Annual Conference on Neural Information Processing Systems (NIPS)*, Long Beach, CA.
- E10 Evans, C., & **Diesner, J.** (2016). Mutual impact and stability of personal ethics and structural balance in a communication network over time. Poster at *2nd Annual International Conference on Computational Social Science (IC2S2)*, Evanston, IL.
- E9 Evans C., **Diesner, J.**, & Blake, C. (2015). Email data analysis as an alternate lens into historical events. Extended abstract *HASTAC*, East Lansing, MI.
- E8 **Diesner, J.**, Rezapour, R., & Pak, S. (2015). Comparative impact assessment of documentaries and related media. Extended abstract *HASTAC*, East Lansing, MI.
- E7 **Diesner, J.** (2014). ConText: Software for the integrated analysis of text data and network data. Preconference Social and Semantic Networks in Communication Research, Conference of *International Communication Association (ICA)*, Seattle, WA.
- E6 **Diesner, J.**, Kim, J., & Higgins, A. (2014). Socio-semantic network analysis for impact assessment. Abstract *European Social Networks Conference (EUSN)*, Barcelona, Spain.
- E5 **Diesner, J.** (2014). Computational assessment of the impact of social justice documentaries. Extended abstract *HASTAC*, Lima, Peru.
- E4 **Diesner, J.**, Aleyasen, A., Kim, J., Mishra, S., & Soltani, S. (2013). Using socio-semantic network analysis for assessing the impact of documentaries. Extended abstract *WIN (Workshop on Information in Networks)*, New York, NY.
- E3 **Diesner, J.**, & Carley, K.M. (2010). Extension of supervised machine learning system to extract socio-technical networks about the Sudan from open source text data. *Women in Machine Learning (WiML) Workshop in conjunction with NIPS*, Vancouver, Canada.
- E2 **Diesner, J.**, & Carley, K.M. (2009). WYSIWII - What You See Is What It Is: Informed approximation of relational data from texts. *General Online Research (GOR) Conference*, Vienna, Austria.

- E1 Carley, K.M., Frantz, T., & **Diesner, J.** (2006). Social and knowledge networks from large scale databases. *56th Conference of International Communication Association (ICA)*, Dresden, Germany.

### Book Chapters

- B10 **Diesner, J.**, Chin, C., & Smith, M. A. (2018). Combining online social networks with text analysis. In R. Alhajj & J. Rokne (Eds.), *Encyclopedia of social network analysis and mining*. Springer. doi: 10.1007/978-1-4939-7131-2\_328. (Updated version based on **Diesner, J.**, & Smith, M. (2014). Combining online maps with text analysis. In R. Alhajj, J. Rokne (Eds.), *Encyclopedia of social network analysis and mining* (pp. 202-206). Springer. doi: 10.1007/978-1-4614-6170-8\_328)
- B9 Gloor, P., & **Diesner, J.** (2018). Semantic social networks. In R. Alhajj, J. Rokne (Eds.), *Encyclopedia of social network analysis and mining*. Springer. doi: 10.1007/978-1-4939-7131-2\_90. (Updated version based on Gloor, P., & **Diesner, J.** (2014). Semantic social networks. In R. Alhajj, J. Rokne (Eds.), *Encyclopedia of social network analysis and mining* (pp. 1654-1659). Springer. doi: 10.1007/978-1-4614-6170-8\_90)
- B8 **Diesner, J.** (2015). Words and networks: How reliable are network data constructed from text data? In E. Bertino, & S.A. Matai (Eds.), *Roles, trust, and reputation in social media knowledge markets* (pp. 81-89). Springer. doi: 10.1007/978-3-319-05467-4\_5
- B7 **Diesner, J.**, Mergel, I., & Carley, K.M. (2011). Network analysis software. In G. Barnett (Eds.), *Encyclopedia of social networks* (pp. 595-598). Sage.
- B6 **Diesner, J.**, & Carley, K.M. (2011). Semantic networks. In G. Barnett (Ed.), *Encyclopedia of social networks* (pp. 767-769). Sage.
- B5 **Diesner, J.**, & Carley, K.M. (2011). Words and networks. In G. Barnett (Ed.), *Encyclopedia of social networks* (pp. 958-961). Sage.
- B4 **Diesner, J.**, & Carley, K.M. (2010). Relation extraction from texts (in German: Extraktion relationaler Daten aus Texten). In C. Stegbauer, R. Häußling (Eds.), *Handbook network research (Handbuch Netzwerkforschung)* (pp. 507 -521). VS Verlag.
- B3 **Diesner, J.**, & Carley, K.M. (2010). Relational methods for analyzing and preventing crime (German: Relationale Verfahren in der Erforschung, Ermittlung und Prävention von Kriminalität). In C. Stegbauer, R. Häußling (Eds.), *Handbook network research (Handbuch Netzwerkforschung)* (pp. 725-738). VS Verlag.
- B2 Weil, S.A., Foster, P., Freeman, J., Carley, K.M., **Diesner, J.**, Frantz, T., Cooke, N. J., Shope, S., & Gorman, J.C. (2008). Converging approaches to automated communications-based assessment of team situation awareness. In M.P. Letsky, N.W. Warner, S.M. Flore, C.A.P. Smith (Eds.), *Macrocognition in teams. Theories and methodologies* (pp. 277–304). Ashgate.
- B1 **Diesner, J.**, & Carley, K.M. (2005). Revealing social structure from texts: Meta-matrix text analysis as a novel method for network text analysis. In V.K. Narayanan, D.J. Armstrong (Eds.), *Causal mapping for information systems and technology research* (pp. 81-108). Idea Group.

### Technical Reports

- T7 Lewis, E.T., Carley, K.M., & **Diesner, J.** (2016). *Displaying responsiveness or asserting identity in organizational language: how concept networks capture rhetorical strategies* (Technical Report CMU-ISR-16-111). Pittsburgh, PA: Carnegie Mellon University, School of Computer Science, Institute for Software Research.
- T6 **Diesner, J.** (2012). *Uncovering and managing the impact of methodological choices for the computational construction of socio-technical networks from texts* (Technical Report CMU-ISR-12-101). Pittsburgh, PA: Carnegie Mellon University, School of Computer Science, Institute for Software Research. (PhD thesis)

- T5 Carley, K.M., **Diesner, J.**, DeReno, M., Columbus, D., Bigrigg, M., Kunkel, F.M. (2006, 2007, 2008, 2009). *AutoMap user's guide* (Technical Reports CMU-ISR-09-114, CMU-ISR-08-123, CMU-ISRI-07-114, CMU-ISRI-06-114). Pittsburgh, PA: Carnegie Mellon University, School of Computer Science, Institute for Software Research.
- T4 **Diesner, J.**, & Carley, K. M. (2008). *Looking under the hood of stochastic part of speech taggers* (Technical Report CMU-ISR-08-131R). Pittsburgh, PA: Carnegie Mellon University, School of Computer Science, Institute for Software Research.
- T3 Frantz, T. L., Carley, K. M., & **Diesner, J.** (2005). *An Automated Methodology for Conducting a Social Network Study of a University Faculty* (Technical Report CMU-ISRI-05-106). Pittsburgh, PA: Carnegie Mellon University, School of Computer Science, Institute for Software Research International.
- T2 Tsvetovat, M., **Diesner, J.**, & Carley, K. M. (2004). *NetIntel: A Database for Manipulation of Rich Social Network Data* (Technical Report CMU-ISRI-04-135). Pittsburgh, PA: Carnegie Mellon University, School of Computer Science, Institute for Software Research International.
- T1 **Diesner, J.**, & Carley, K. M. (2004). *AutoMap1.2 - Extract, analyze, represent, and compare mental models from texts* (Technical Report CMU-ISRI-04-100). Pittsburgh, PA: Carnegie Mellon University, School of Computer Science, Institute for Software Research International.

#### **Selected other Papers and Presentations (light or no peer review)**

- P6 Dinh, L., Akuba, I., & **Diesner, J.** (2020, 2021). Interorganizational collaboration networks during 2018 Hurricane Michael response. *Critical Infrastructure Resilience Institute 11th Maritime Risk Symposium* (held online) AND at *US Department of Homeland Security Centers of Excellence (COE) Summit*. Fairfax, Virginia (held online).
- P5 Yang, P., Sarol, M.J., Dinh, L., & **Diesner, J.** (2020, 2021). Annotation guidelines for entity tagging and semantic role labeling of disaster-related text documents. *Critical Infrastructure Resilience Institute 11th Maritime Risk Symposium* (held online) AND at *US Department of Homeland Security Centers of Excellence (COE) Summit*. Fairfax, Virginia (held online).
- P4 Jiang, L., Dinh, L., Rezapour, R., & **Diesner, J.** (2020). Sentiment-based PageRank to infer hierarchical structures in social networks. *Poster at Women in Data Science (WiDS) Conference*, UIUC. **2nd best poster award.** (light peer review)
- P3 Lu, T., Parulian, N., Avram, M., Mishra, S., & **Diesner, J.** (2020). Adversarial perturbations to manipulate the perception of power and influence in networks. *Poster at Women in Data Science (WiDS) Conference*, UIUC. **Best poster award.** (light peer review)
- P2 Shen, H., & **Diesner, J.** (2014). Semantic network analysis of the public discourse on censorship in China. Paper at *National Communication Association 100th Annual Conference*, Chicago, IL.
- P1 Lewis, E.T., **Diesner, J.**, & Carley, K.M. (2001). Using automated text analysis to study self-presentation strategies. *Proceedings of Computational Analysis of Social and Organizational Systems Conference (CASOS)*, Pittsburgh, PA.

#### **Presentations at International Sunbelt Social Network Conference (light review)**

- N25 Rezapour, R., Park, J., & **Diesner, J.** (2020). Detecting characteristics of cross-cutting language networks on social media.
- N24 Avram, M., Mishra, S., Parulian, N., & **Diesner, J.** (2019). Adversarial perturbations for identifying strategies toward biasing the perceptions of power and influence in social networks.
- N23 Dinh, L., Rezapour, R., Jiang, L., & **Diesner, J.** (2019). Considering transitivity and leveraging text content to assess balance in directed networks.
- N22 **Diesner, J.**, Jiang, M. & Narisetti, S. (2018). Reliable construction of semantic networks based on text data and measurement of effects in text-based networks.

- N21 Evans, C., & **Diesner, J.** (2016). Interplay between personal morals with tie and cluster formation in a corporate communication networks.
- N20 **Diesner, J.**, & Pak, S. (2015). Contextualization and validation of networks extracted from text data.
- N19 Diesner, J., Kim, J., & Pak, S. (2014). Socio-semantic network analysis for impact assessment of documentaries.
- N18 Kim, J., & **Diesner, J.** (2014). Structure of scientific collaboration: Considering the order of co-authors for co-authorship networks.
- N17 Soltani, K., & **Diesner, J.** (2014). Improved visualization of multi-mode networks that entail geo-coded entities.
- N16 Wilner, S., Aleyasen, A., Mishra, S., Soltani, K., & **Diesner, J.** (2014). Comparison of network data constructed from text data and textual meta-data.
- N15 **Diesner, J.**, & Carley, K.M. (2013). Error propagation and robustness of relation extraction methods.
- N14 Kim, J., & **Diesner, J.** (2013). Structural balance in story structures
- N13 **Diesner, J.**, & Carley, K.M. (2012). Impact of methods for relation extraction from text data on network analysis results.
- N12 **Diesner, J.**, & Carley, K.M. (2011). Extraction and validation of socio-technical network data about the Sudan from text corpora.
- N11 **Diesner, J.**, & Carley, K.M. (2010). Computational integration of network theory and topic modeling for investigating the relationship between socio-technical networks and innovation in the EU.
- N10 Mergel, I., **Diesner, J.**, & Carley, K.M. (2010). Attention networks among members of congress.
- N9 Stuetzer, C., **Diesner, J.**, Carley, K.M., Koehler, T., & Thiem, G. (2010). Identifying and integrating social roles and structural for the case of collaborative e-learning environments.
- N8 **Diesner J.**, Carley, K. M., & Katzmaier, H. (2008). He says, she says - Identity and polarization in communication networks of an organization in crisis.
- N7 McConville, E., **Diesner, J.**, & Carley, K.M. (2008). AutoMap software demonstration.
- N6 **Diesner, J.**, Carley, K. M., Katzmaier, H. (2007). The morphology of a breakdown. How the semantics and mechanics of communication networks from an organization in crisis relate.
- N5 **Diesner, J.**, Pfeffer, J., & Katzmaier, H. (2006). Evaluating scientific classification systems by bottom-up clustering of abstracts using semantic network analysis.
- N4 **Diesner, J.**, & Carley, K. M. (2005). Revealing and comparing the organizational structure of covert networks with network text analysis.
- N3 Carley, K. M., Frantz, T., **Diesner, J.**, & Davis, G. (2005). Groups: surface and deep structure.
- N2 Lewis, E.T., Carley, K. M., & **Diesner, J.** (2003). Concept networks in organizational language: consensus or creativity?
- N1 Lewis, E.T., **Diesner, J.**, & Carley, K. M. (2002). Using network analysis to extract and analyze self-presentation strategies in texts.

### **Selected Open-Source Resources**

- R5 Han, K., Yang, P., Mishra, S., & **Diesner, J.** (2020): WikiCSSH - Computer Science Subject Headings from Wikipedia. University of Illinois at Urbana-Champaign. [https://doi.org/10.13012/B2IDB-0424970\\_V1](https://doi.org/10.13012/B2IDB-0424970_V1) [Lexical Resource]

- R4 Rezapour, R., Diesner, J. (2019) Expanded Morality Lexicon. [https://doi.org/10.13012/B2IDB-3805242\\_V1.1](https://doi.org/10.13012/B2IDB-3805242_V1.1) [Lexical Resource]
- R3 Diesner, J., Aleyasen, A., Chin, C., Mishra, S., Soltani, K., Tao, L. (2015). ConText: Network Construction from Texts [Software]. Available from <http://context.ischool.illinois.edu>
- R2 NodeXL [Software]. Modules for semantic networks. Available from <https://www.smrfoundation.org/nodexl/>
- R1 Diesner, J., Mishra, S., Tao, L., & Chin, C. (2015). SAIL: Sentiment Analysis and Incremental Learning [Software]. Available from <https://github.com/uiuc-ischool-scanr/SAIL>

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## KEYNOTE TALKS AND INVITED TALKS

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### Keynote Talks

1. 5th International Conference on Computational Social Science (IC2S2), Amsterdam, Netherlands: “Responsible Social Computing: Validating Network Data and Theory” (2019)
2. Digital Humanities in D-A-CH (DHd), Frankfurt, Germany: „Understanding Social Structure and Behavior through Responsible Mixed-Methods Research: Bias Detection, Theory Validation, and Data Governance“ (2019)
3. European Computational Social Science Symposium (EuroCSS), Workshop on Reframing Research, Cologne, Germany: “Responsible Social Computing: Validating Network Data and Theory” (2018)
4. Annual Conference of the German Association for Network Research (DGNet), Darmstadt, Germany: “Responsible Social Computing” (2018)
5. Ethics in a Data-Driven World Symposium, Deloitte Foundation Center for Business Analytics, UIUC: “Practical Ethics and Responsible Computing” (2018)
6. Historical Network Research (HNR) Conference, Brno, Czech Republic: “Bias Detection and Theory Validation in Social Network Analysis” (2018)
7. Collaborative Research on Extreme Scale Text Analytics (CRESTA) Workshop, UIUC: “Human Centered Computing: Innovating compliantly and transparently” (2018)
8. COINs (Collaborative Innovation Networks) Conference, Rome, Italy: “Words and Networks: Using Natural Language Processing to Enhance Graphs and Test Network Theories” (2016)
9. GOR (General Online Research) Conference, Dresden, Germany: “Rich and Reliable Signals: Making Responsible Choices for Working with Social Interaction Data” (2016)
10. 9th Historical Network Research Symposium, Ruhr University, Bochum, Germany: “Developing practical solutions to real world problems by going from words to networks” (2015)
11. NetGlow Conference, Saint-Petersburg, Russia: “Socio-semantic networks” (2014)
12. Ditact Conference – women’s IT studies, University Salzburg, Austria: “Computational Thinking in the playroom, classroom, boardroom” (2014)
13. DISC (Daegu International Social Network Conference), Daegu, South Korea: “Words and Networks” (2013)
14. Future of Historical Network Research Conference, Hamburg, Germany: “Of micro-scopes and telescopes in the digital humanities and computational social sciences” (2013)

### Invited Talks at Conferences

15. Reflective AI in a digital society Conference, Berlin, Germany (held online): “Biases in Social Computing” (2020)
16. German Council for Scientific Information Infrastructures, Conference on Challenge Data Quality, Hannover, Germany:” Reliable Signals? Discovering the Impact of the Quality of Social Interaction Data on Social Science Theory, Knowledge, and Practical Applications” (2020)



17. Bulletproof Hosting and Botnet Attacks, German Armed Forces Command and Staff College, Hamburg, Germany: "Adversarial perturbations for biasing the perception of individual power and influence in networks" (2019)
18. 2nd Conference of the Academy of Sociology on Digital Societies, Konstanz, Germany: "Impact of Human Decision Making on Social Computing Research" (2019)
19. Re-Computing Social Sciences Conference, UC Davis: "Re-Computing Social Sciences: What Have We Learned?" (2017)
20. Open Science Conference, Berlin, Germany: "Innovating compliantly and transparently – road blocks, myths and solutions" (2017)
21. Cultural Analytics Symposium, University of Notre Dame: "Impact Assessment of Information Products and Data Provenance" (2017)
22. iConference, Workshop on Ethics, Philadelphia, PA: "Usable Ethics" (2016)
23. Impact Distribution Lab, BritDoc and Ford Foundation, New York, NY: "Computational Impact Assessment and ConText" (2014)
24. The Media Consortium Annual Conference, Chicago, IL: "Impact Assessment and ConText" (2014)
25. Purdue University, KredibleNet Workshop: "Words and Networks: How much can we trust Social Network Data built based on Text Data?" (2013)
26. University of Maryland, School of Information, Summer Social Webshop: "Words and Networks: Considering the Content of Text Data for Network Analysis" (2012)
27. Bulletproof Hosting and Botnet Attacks, German Armed Forces Command and Staff College, Hamburg, Germany: "Network Analysis and Data Mining for Examining Covert Networks" (2011)
28. IT Defense Conference, Frankfurt, Germany: "Network Analysis and Text Mining for Detecting and Examining the Structure, Functioning and Evolution of Covert Networks" (2011)
29. Bulletproof Hosting and Botnet Attacks, German Armed Forces Command and Staff College, Hamburg, Germany: "Network Analysis for the Domain of Covert Networks" (2010)
30. Pennsylvania Association for Gifted Education Conference: "Encouraging the participation of girls and women in computer science: research and action" (2010)
31. Bulletproof Hosting and Botnet Attacks Konferenz, NATO Schule, Oberammergau, Germany, 2009: „Natural Language Processing and Network" (2009)
32. Exploring under the surface: Yielding higher value from life science transactions Conference (Boston, MA): "Network analytics in life science" (2008)
33. Ars Electronica, Linz, Austria, Age of Simulation Conference: "Communication Networks from the Enron Email Corpus" (2006)

#### **Invited Talks at Universities**

34. University of Luxembourg: Science of Science lecture series (2022)
35. Northwestern University, Technology and Social Behavior (TSB) Distinguished Speaker Series: "Responsible Computing with Social Data: Bias Detection, Theory Validation, and Impact Assessment" (2021)
36. University of Michigan, Ann Arbor: "Responsible Social Computing: Bias Detection and Theory Validation" (2019)
37. University of Cologne, Germany: "Understanding Social Structure and Behavior through Mixed-Methods Research: Bias Detection and Theory Validation" (2019)
38. Northwestern University, Institute on Complex Systems (NICO): "Responsible Social Computing" (2018)
39. Columbia University, Economic History Seminar, NY: "It's Always About the People. Enron is no Different. Email network analysis" (2014)

40. Purdue University, Lafayette, IN: “Computational Impact Assessment of Documentaries and Media” (2014)
  41. CUNY, Graduate School of Journalism, New York, NY: “Computational Impact Assessment and ConText” (2014)
  42. Saint-Petersburg State University, Russia: “From Words to Networks: The Importance of Methodological Choices for Extracting Semantic Networks from Texts” (2013)
  43. KAIST (Korea Advanced Institute of Science and Technology), Daejeon, South Korea: “Words and Networks” (2013)
  44. Free University, Amsterdam, Netherlands: “From Words to Networks: Relevance of Methodological Choices for Practical Applications” (2013)
  45. University of California, Berkeley: “From Words to Networks: Relevance of methodological choices for real-world applications” (2013)
  46. Northwestern University, Science of Networks in Communities Center (SONIC): “From Words to Networks: Relevance of methodological choices for real-world applications” (2013)
  47. University of Hamburg, Germany: “Mapping and Investigating Covert Networks via Network Analysis and Text Mining” (2012)
  48. European Research Center for Information Systems, University of Münster, Germany: “Words and Networks: Considering the Substance of Information for Constructing and Analyzing Socio-Technical Networks” (2011)
  49. Syracuse University, School of Information: “Words and Networks” (2011)
  50. Dresden University of Technology, Education Sciences Department, Germany: “Words and Networks” (2009)
  51. University of Applied Sciences, Mittweida, Germany, Complexity Workshop: “Data Collection online: Feasible does not have to mean legal” (2008)
  52. University of Applied Sciences, Mittweida, Germany, Complexity Workshop: “System Dynamics: Approach to computational modeling and simulation” (2008)
- Invited Talks at other Public and Private Institutions**
53. Bayer Pharma/ Crop Science: “Human-Centered Data Science for Crisis Informatics and Impact Assessment” (2020)
  54. Leibniz Institute for German Language, Mannheim, Germany: “Responsible Social Computing” (2019)
  55. Critical Infrastructure Resilience Institute (CIRI), webinar: “Supporting practitioners and analysts in making decisions about data analytics to study humanitarian assistance and disaster relief operations” (2019)
  56. Leibniz Institute for German Language, Mannheim, Germany: “Leveraging Text Data and Machine Learning for Impact Assessment” (2018)
  57. European Forum Alpbach, Austria: “Computational Problem Solving: Transformative Progress and Key Issues with Human Centered Data Science” (2016)
  58. Army Corps of Engineers, Champaign, IL: “Rich and Reliable Signals: Making Responsible Choices for Working with Social Interaction Data” (2016)
  59. KISTI (Korea Institute of Science & Technology Information), Daejeon, South Korea: “Words and Networks” (2013)
  60. Science Café, Champaign Public Library: “Network Science” (2013)
  61. Center for Investigate Reporting (CIR), Oakland, CA: “Socio-Semantic Network Analysis for Impact Assessment of Documentaries” (2013)
  62. Sundance Institute, Creative Producing Summit: “Impact Assessment of (Social Justice) Documentaries” (2013)
  63. Paley Center for Media, New York, NY: “Impact Assessment and ConText” (2013)

64. Dialego corporation, Aachen, Germany (2008)
65. vm-people, LLC, Berlin, Germany (2008)
66. Deutsche Welle, Berlin, Germany: “Mapping Politics”, with P. Ueschner (2008)
67. Chemnitz Art Museum, Germany: “Art Network Visualization”, with C. Stuetzer (2008)
68. FAS.research, LLC, Vienna, Austria (2005)
69. Washington Institute for Near East Policy, Washington, D.C.: “Extraction of the Social Structure of Covert Networks from Texts” (2005)

#### **Invited Speaker at Illinois**

70. Big Data Summit: “Biases in Computing” (2020)
71. Five-year plan launch: “Data Science Education at Illinois” (2019)
72. Data Science Day: “Data Governance” (2018)
73. Conservation Legacies Planning Workshop (MacArthur Foundation/ UIUC): “Impact Assessment” (2018)
74. Inaugural Industry Data Science Summit: “Data Governance” (2018)
75. Digital Humanities Symposium: “Bringing Computational Social Science to the Real World: Impact Assessment of Issue-Focused Public Media” (2015)
76. Extension Leadership Team: “Developing Practical Solutions to Real World Problems through Social Computing Approaches” (2015)
77. Graduate Conference on Computational Social Science: “Human-Centered Data Science at the Nexus of Network Analysis and Text Mining” (2014, 2016)
78. CyberGIS Brownbag Series, NCSA: Impact Assessment” (2014)
79. Research Park Champaign, IL, Corporate Roundtable: “Data Mining and Knowledge Discovery Methods For Cybersecurity” (2013)
80. Digital Humanities Conference (2013)

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## **TEACHING**

### **Summary & Highlights:**

- **Ph.D. Students: 4 graduated and 12.5 current, Master’s students (research): 30, undergraduate students (research): 22, PostDoc: 1**
- **University teaching, since 2012: created and taught 5 new courses, redesigned 3 courses**
- **Teaching external tutorials and workshops: 50+**

**Full courses:** developed syllabi, course structure and tests, administered grades:

#### **University of Illinois at Urbana-Champaign, iSchool:**

- Responsible Data Science and AI (newly developed): Fall 2021, Spring 2022
- Data Governance (redesigned): Fall 2021
- Network Analysis (newly developed): Fall 2012-2016, Spring 2014-2015, 2017-2020
- Social Computing (newly developed): Fall 2012-2013, Spring 2016
- Advanced Machine Learning and Social Computing (newly developed): Fall 2018, Spring 2019
- Research Design (redesigned): Fall 2017-2018
- Doctoral Proseminar: Fall 2017, 2019, Spring 2018, 2020
- Digital Humanities (redesigned): Spring 2013-2014
- Information Networks: Spring 2012-2013
- Social Aspects of Information Technologies: Spring 2012
- Data Science and AI in Society: Responsible Computing, Data, and Tech for Everybody (newly developed), to be offered in AY2021/22

#### **Carnegie Mellon University, School of Computer Science:**

- Introduction to Social Network Analysis, Spring 2010

**Short courses:** developed syllabi and course structure, administered grades (in English):

**University of Illinois at Urbana-Champaign**

- “Network Analysis” for “Information Science and Engineering Summer Program” for “Global Education and Training” at UIUC, 2-week course, Summer 2017, 2018 (total: 122 students)

**University of Hamburg, Germany, Graduate School for Business, Economics and Social Science:**

- Information and Relation Extraction from Text Data and Network Analysis (September 2011)

**Mittweida University of Applied Sciences, Germany**

- Extraction of Relational Data from Texts and Computational Thinking (Summer 2008)
- Extraction of Relational Data from Texts & Applications to Multi-Level Data (Summer 2007)

**Tutorials and Workshops:** developed interdisciplinary training modules (incl. syllabi and teaching material), delivered hands-on training and lectures:

- “Hands-on advanced machine learning for information extraction from tweets tasks, data, and open source tools”, with Shubhanshu Mishra, at:
  - o European Conference on Information Retrieval (ECIR) (2022)
  - o International Conference on Language Resources and Evaluation (LREC) (2020, 2022)
  - o Web Conference (WWW) (2021)
  - o International Conference on Computational Social Science (IC2S2) (2020)
  - o ACM Hypertext (2019)
- “Hands-on tutorial on analyzing social network data in Jupyter Python: The essentials, signed networks, and network optimization”, with Samin Aref, Ly Dinh, and Rezvaneh Rezapour, at:
  - o International Sunbelt Social Network Conference (2022)
  - o International Conference on Computational Social Science (IC2S2) (2021)
  - o Web Conference (WWW) (2021)
  - o Networks (joint Sunbelt & NetSci Conference) (2021)
- “Best Practices for Grant Proposal Development”
  - o Association for Information Science and Technology (ASIST) (held online) (2020, 2021)
- “Network analysis and natural language processing”
  - o Getting Started in Digital Humanities workshop, University of Illinois at Chicago (2020)
  - o COINS Conference, Rome, Italy (2016)
  - o Academy of Management, Vancouver, Canada (2015)
  - o University Bremen, Germany (2015)
  - o Ruhr University Bochum, Germany (2015)
  - o University Mainz, Germany (2014)
  - o HASTAC Conference, Peru (2014)
  - o Saint-Petersburg State University, Russia (2013, 2015)
  - o International Sunbelt Social Network Conference (2009, 2010, 2014-16)
  - o Daegu International Social Network Conference (DISC), South Korea (2013, 2014)
  - o International Research Methods Workshop, University Southern Denmark and Flensburg, Germany (2012, 2013)
  - o POSTECH, South Korea (2013)

- NATO (Foreign Area Specialists – Operational Level), Hamburg, Germany (2013)
- University of the Federal Armed Forces, Hamburg, Germany (2012)
- IT Defense Conference, Munich, Germany (2012)
- Columbia University, New York, NY (2011)
- Humboldt University Berlin, Center for Comparative Analysis of Social Structure (2011)
- Network Text Analysis and AutoMap training (one day) at Annual CASOS Summer Institute, Carnegie Mellon University, Pittsburgh, PA (2004-2011)
- Case Western University, Weatherhead School of Management, Cleveland, OH (2010)
- Department of National Defense, Centre for Security Science, Ottawa, Canada (2009)
- International Center for the Study of Terrorism, Penn State University, PA (2009)
- General Online Research Conference (GOR) (Germany, Austria) (2008-09)
- World Congress on Social Simulation, George Mason University, Fairfax, VA (2008)
- North American Association for Computational Social and Organizational Science (NAACSOS) Conference, Emory University, Atlanta, GA (2007)
- Graduate School of Public and International Affairs, University of Pittsburgh, PA (2005)
- Max Planck Institute for the Study of Societies, Cologne, Germany (2005)

### **Selected Guest Lectures**

- UIUC/ iSchool: “Social Media Analytics”, courses: Digital Media Ethics, taught by Lorrie Kendall, 2014, Sociotechnical Data Analytics, taught by Cathy Blake, 2014
- UIUC/ iSchool: “Teaching programming with Storytelling Alice” course: Storytelling, taught by Kate McDowell, 2012, 2013
- Carnegie Mellon: “Network Visualization”, course: Information Visualization, taught by Ben Fry and Golan Levin, 2007

### **Training in Pedagogy and Teaching**

- Completion of “Documentation of Teaching Development Program”, Eberly Center for Teaching Excellence, Carnegie Mellon, 06/2009 – 05/2010

### **Student Advising**

PhD thesis chair, students graduated:

- Rezvaneh “Shadi” Rezapour, UIUC, iSchool, “From user-generated text to insight: context-aware measurement of social impacts and interactions using natural language processing”, advisee 08/2015 – 8/2021, next job: Assistant Professor (tenure track), College of Computing and Informatics, Drexel University, Philadelphia, PA
- Garrick Sherman, UIUC, iSchool, “Document expansion and language model re-estimation for information retrieval”, (**received Berner-Nash Award for UIUC iSchool’s best PhD Thesis of the year**), advisee 08/2017-08/2019, next job: Senior Data Scientist, University of Pennsylvania, Philadelphia, PA
- Shubhanshu Mishra, UIUC, iSchool, “Information extraction from digital social trace data with applications to social media and scholarly communication data”, advisee 08/2013-6/2019, next job: Machine Learning Researcher at Twitter
- Jinseok Kim, UIUC, iSchool, “The impact of author name disambiguation on knowledge discovery from large-scale scholarly data” (**received Berner-Nash Award for UIUC iSchool’s best PhD Thesis of the year**), advisee 08/2012-08/2017, next job: Assistant Research Professor (tenure track), University of Michigan, Ann Arbor

PhD thesis proposal (preliminary exam) chair:

- Ly Dinh, UIUC, iSchool, "Advances to network analysis theories and methods with applications in social, organizational, and crisis settings" (proposed 11/30/2020), advisee since 08/2016
- Aseel Addawood, UIUC, Informatics, "Information Credibility on Social Media for Controversial Health Issues" (proposed: 12/2017), advisee 01/2017-12/2018 (finished with different thesis committee)
- Craig Willis, UIUC, iSchool, "Temporal Language Models for Information Retrieval" (proposed: 09/2017), advisee 08/2017-08/2019 (finishing with different thesis committee)

PhD student advisees:

- Jenna Kim, UIUC, iSchool, 01/2022-
- Xiujia Yang, UIUC, Informatics, 01/2022 -
- Chieh-Li Chin, UIUC, Informatics, 08/2021-
- Jana Marie Perkins, UIUC, iSchool, 08/2021-
- Haejin Lee, UIUC, iSchool, 05/2021-
- Angela Fike, UIUC, Informatics, 08/2020-
- Clara Belitz, UIUC, iSchool, 08/2020- (co-advised)
- Sul lam Jeoung, UIUC, iSchool, 08/2020-
- Lan Jiang, UIUC, iSchool, 05/2020- (co-advised)
- Yubin Ge, UIUC, Computer Science, 01/2020-
- Pingjing Yang, UIUC, Informatics, 08/2019-
- Apratim Mishra, UIUC, iSchool, 08/2019- (co-advised)
- Kanyao Hao, UIUC, iSchool, 05/2019-
- Ly Dinh, UIUC, iSchool, 08/2016-

Doctoral thesis committee member:

- Linh Hoang, UIUC, iSchool, proposed 2021
- Wonjun Choi, UIUC, Department of Recreation, Sport & Tourism, graduated 2021
- Kirstin Phelps, UIUC, iSchool, graduated 2020
- Kiumars Soltani, UIUC, Informatics, graduated 2018
- Ankit Rai, UIUC, Informatics, graduated 2018
- Natalie Smith, UIUC, Recreation, Sport and Tourism, graduated 2016
- Natalie Lambert, UIUC, Communication, graduated 2015
- Brent Fegley, UIUC, Informatics, graduated 2015
- Andrew Pilny, UIUC, Communication, graduated 2015
- Rania Al-Sabbagh, UIUC, Linguistics, graduated 2015

Master's theses supervised:

- Amirhossein Aleyasen, UIUC, MS CS, 07/2015, "Entity recognition for multi-modal socio-technical systems" (continued to UIUC CS PhD program)
- Patric Ueschner, Mittweida University of Applied Sciences, Communication (2007-2008)

Former PhD advisees:

- Jai Hyun Park, UIUC, iSchool, 08/2019- 10/2021
- Janina Sarol, UIUC, Informatics, 08/2018-05/2021
- Mihai Avram, UIUC, iSchool, 07/2018-05/2019
- Ming Jiang, UIUC, iSchool, 08/2014-08/2019
- Craig Evans, UIUC, Informatics, 08/2014-12/2016, 08/2019-08/2021
- Kiumars Soltani, UIUC, Informatics, 08/2012-2015
- Sean Wilner, UIUC, Informatics, 08/2012-12/2013

Additional funded Research Lab members:

- PostDoc
  - o Nick LaLone, UIUC, Postdoctoral Scholar, 08/2018- 07/2019 (next employment: Assistant Professor, University of Nebraska at Omaha)
- PhD students
  - o Shameem Ahmed, UIUC, iSchool, PhD student, 8/2012-08/2013
- MS students
  - o Tiffany Lu, UIUC, MS Information Management, 01/2019-12/2019, next employment: Software Engineer, Intuit
  - o Lan Jiang, UIUC, MS Information Management, 05/2019-05/2020, continued to iSchool PhD program
  - o Saumil Shah, UIUC, MS Information Management, 02/2018-05/2019, next employment: Data Scientist, Walmart
  - o Jenna Jordan, UIUC, MS Library and Information Science, 08/2018-05/2019
  - o Harathi Korrapati, UIUC, MS Bioinformatics, 2015-2016, next employment: HPC Storage Engineer, National Center for Supercomputing Applications
  - o Rezvaneh Rezapour, UIUC, MS Information Management, 2014-2015, continued to iSchool PhD program
  - o Liang Tao, UIUC, MS Agricultural Engineering, 2013-2015, next employment: Bloomberg
  - o Amirhossein Aleyasen, UIUC, MS Computer Science, 2013-2015, continued to CS PhD program

Advisor for Research Practica (omitting students already listed as advisees):

- Ines Theron, TU Munich, Germany, Spring 2022
- Daniela Delgado Ramos, UIUC, PhD student, Informatics, Spring 2021
- Hannah Christensen, UIUC, MSIM student, Fall 2018
- Siva Narisetti, UIUC, PhD student, Informatics, Spring 2018
- Kyonghoo Lee, UIUC, PhD student, Informatics, Spring 2014
- Mikko Tuomela, UIUC, PhD student, Informatics, Fall 2013

Advisor for Independent/ Individual Studies (omitting students already listed as advisees):

- Sumeet Kulkarni, MSIM student, iSchool, Spring 2022
- Powell Hung, UIUC, MSIM student, iSchool, Spring 2022
- Jerome You, UIUC, MSIM student, iSchool, Spring 2022
- Kinjal Shah, UIUC, MSIM student, iSchool, Spring 2022
- Maggie Zhang, UIUC, PhD student, Communication and Media, Spring 2022
- Hannah Kang, UIUC, MSLIS student, iSchool, Fall 2021, Spring 2022
- Yeonhwan (Rae) Jeong, UIUC, MSIM student, iSchool, Fall 2021, Spring 2022
- Asmita Khode, UIUC, MSIM student, iSchool, Fall 2021
- Rohan Charudatt Salvi, UIUC, MSIM student, iSchool, Fall 2021
- Kevin Redline, UIUC, MSLIS student, iSchool, Spring 2021
- Ko-Mei Lin, UIUC, MSIM student, iSchool, Spring 2021
- Ravindra Harshitha, UIUC, MSIM student, iSchool, Fall 2019
- Nikolaus Parulian, UIUC, PhD student, iSchool, Spring 2019, Fall 2019
- Ke-Rou Wang, UIUC, MSIM student, iSchool, Spring 2019, Fall 2019
- Ved Prakash Upadhyay, UIUC, MSIM student, iSchool, Fall 2018
- Yingjun Guan, UIUC, MSIM student, iSchool, Spring 2017

- Hong Shen, UIUC, PhD student, Communication, Spring 2015
- Angela Stangl, UIUC, MSLIS student, iSchool, Spring 2014
- Andrea Thomer, UIUC, PhD student, iSchool, Spring 2014
- Kinyetta Nance, UIUC, PhD student, iSchool, Spring 2014

Training Undergraduate Researchers:

- Stuti Agrawal, UIUC, BS in Computer Science, Spring 2022
- Justin Kim, UIUC, BS in Statistics, Spring 2022
- Neal Xu, UIUC, BS in Economics, Fall 2021
- Zhan Shi, UIUC, BS in Statistics and Econometrics, Fall 2021
- Anjolee Rice, UIUC, BS in Linguistics, Fall 2021
- Jingqi Kou, UIUC, BS in Mathematics and Statistics, Fall 2021
- Max Song, UIUC, BS in Electrical Engineering, Spring 2021
- Namrata Vajrala, UIUC, BS in Computer Science, Spring 2021
- Haejin Lee, UIUC, BS in Mathematics and Statistics, Fall 2020
- Ikenna Akuba, UIUC, BS in Econometrics, Fall 2020
- Angitha Bright, UIUC, BS in Political Science, Fall 2020
- Wanxing Dai, UIUC, BS in Statistics, Fall 2020
- Erin Dowdy, UIUC, BS in Computer Science, Fall 2020
- Minseok Jung, UIUC, BS in Philosophy, Fall 2020
- Farras Rivai, UIUC, BS in Information Science, Fall 2020, Spring 2021, Fall 2021
- Rachel Kim, UIUC, BS in Linguistics (Informatics undergrad researcher), 10/2019-05/2020
- Kehan Li, UIUC, BS in Computer Science and Statistics, 05/2019 - 05/2020
- Yaoyu Zhang, UIUC, BS in Accountancy (Informatics undergrad researcher), 09/2018-05/2019
- Jessica Schmiederer, UIUC, BS in Actuarial Science and Economics, 09/2017-05/2018
- Tiffany Lu, UIUC, BS in Computer Engineering, 10/2017-05/2018
- Sandra Franco, UIUC, BS in Linguistics, 2014-2015

Summer and academic year student research interns:

- Samira Zad (PhD student, Computer Science, Florida International University), Summer 2018

Personnel Responsibilities:

- Chieh-Li Chin, Research Manager (2018-2021)

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**SERVICE AND LEADERSHIP**

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**Summary & Highlights**

- **Conference committee member: 80+**
- **Journals peer-reviewed for: 25**
- **Member of editorial boards: 5**

**Editorial Board Member**

- Associate Editor: Science Advances, impact factor 14.14 (since 2020)
- Associate Editor: Social Network Analysis and Mining (SNAM), impact factor 3.87 (2017-2021)
- Editorial board member: Compactional Communication Research (since 2019)
- Editorial board member: Social Network Analysis and Mining (SNAM) (2014-07/2017)
- Editorial board member: Connections (Journal) (since 2012)

**Advisory Board Member**



- Advisory board member: Diachronic Dynamics of Lexical Networks (DYLEN), funded by Austria Academy of Sciences, Austria Centre for Digital Humanities and Cultural Heritage (2019-2021)
- GAIN (German Academic International Network) (2014-2018)
- Aspen Institute, Advocacy Planning and Evaluation Program (APEP): Media Impact Evaluation Advisory Group (2012)

### **Conference Leadership Roles**

- Workshop Co-chair: AAAI International Conference on Web and Social Media (ICWSM) (2019)
- Program Committee Co-chair: International Conference on Computational Social Science (IC2S2) (2018)
- Program Committee Co-chair: International Workshop on Social Sensing (SocialSens), in conjunction with 3rd ACM/IEEE International Conference on Internet of Things Design and Implementation (IoTDI) (2018)
- Program Committee Co-chair: IEEE/ ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM) (2017)

### **Conference and Workshop Organizing**

- International Sunbelt Social Network Conference: organized sessions “Words and Networks” (2010-2016, 2018-2022, with ~ 193 presentations), co-organized with Peter Gloor
- International Conference on Language Resources and Evaluation (LREC): Workshop: Computational Impact Detection from Text Data (2018, 2020)
- 2nd European Symposium on Societal Challenges in Computational Social Science (Euro CSS: Bias and Discrimination): Workshop: “Biases in social data and machine learning”, Cologne, Germany (2018)
- North American Social Networks Conference (NASN): organized session “Words and Networks” (2018, 2021)
- International Communication Association (ICA): Preconference: “Social and Semantic Networks in Communication Research” (S2NETCOM) (2014, 2015)
- Cybersecurity Symposium Chicago (2012, 2014)
- ACM Web Science Conference: Workshop: “Words and Networks” (WON) (2012)
- Cybersecurity Symposium Pittsburgh (2011)
- IEEE Conference on Social Computing: Workshop: “Synergies between texts and networks” (2010)

### **Conference Program Committee Member (alphabetical order)**

- AAAI International Conference on Web and Social Media (ICWSM) (2014, 2016-2018)
- ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) (2017, 2018)
- ACM Conference on Fairness, Accountability, and Transparency (FAccT) (2022)
- Association for Computational Linguistics (ACL) (2018-2020)
- Asia-Pacific Chapter of the Association for Computational Linguistics and the International Joint Conference on Natural Language Processing (AAACL-IJCNLP) (2020)
- ACM HYPERTEXT and Social Media (2012-2013, 2016-2019)
- ACM/ IEEE International Conference on Advances in Social Networks Analysis and Mining (ASONAM) (2011, 2013, 2015-2016, 2018-2021)
- Complex Networks (2016, 2017, 2019-2020)
- Conference of Journal of Information Technology & Politics (JITP) (2011)
- Empirical Methods in Natural Language Processing (EMNLP) (2014, 2018-2020)
- European Chapter of the Association for Computational Linguistics EACL (2021)

- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD) (2013, 2014, 2015)
- General Online Research (GOR) Conference (2009)
- Historical Network Research Conference (HNR) (2020)
- INFORMATIK Conference (2011)
- International Communication Association (ICA) (2022)
- International Conference on Computational Linguistics (COLING) (2018)
- International Conference on Computational Social Science (IC2S2) (2017, 2018, 2021)
- International Conference on Collaborative Innovation Networks (COINs) (2013, 2015, 2017)
- International Conference on Networks & Communications (NETCOM) (2015)
- International Conference on Social Computing and its Applications (SCA) (2013)
- International Conference on Social Informatics (SocInfo) (2011-2014, 2016-2020)
- International Conference on Social Media and Society (SMSociety) (2015-2018)
- International Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation Conference (SBP-BRiMS) (2015-2020)
- International World Wide Web Conference (WWW, TheWebConf) (2018-2022)
- Modeling, Analysis and Management of Social Networks and their Applications (SOCNET) (2014)
- Multidisciplinary Social Networks Research Conference (MISNC) (2014)
- North American Social Networks Conference (NASN) (2018)
- Networks in the Global World (NetGloW) (2014, 2016)
- Workshop on Big (and Small) Data in Science and Humanities (BigDS@BTW) (2017, 2019)

#### **Panel Organizer or Panelist**

- Panelist: Midwest BigData Hub - Annual Conference: “AI, Data, & Ethics”, Cleveland, OH (2018)
- Panelist: Cyber Physical Systems Week (CPS), Social Sensing Workshop: “Understanding the Social in Social Sensing”, Pittsburgh, PA (2017)
- Participant: Schloss Dagstuhl workshop “Digital Humanities” (2014)
- Panelist: Sundance Institute, Creative Producing Summit (2013)
- Panelist: Future of Historical Network Research Conference, Hamburg, Germany (2013)
- Panel organizer: General Online Research (GOR) Conference: “Data collection online” (2009)

#### **Reviewer, Journals (alphabetical)**

- ACM Transactions on Information Systems, ACM Transactions on the Web, ACM Transactions on Speech and Language Processing, Advances in Complex Systems, Asian Journal of Communication, Big Data and Society, Communication Methods and Measures, Computational Communication Research, Digital Scholarship in the Humanities, Field Methods, International Journal of Information Management (IJIM), International Journal of Knowledge-based Organizations, Journal of Artificial Intelligence (Kuenstliche Intelligenz), Journal of Artificial Societies and Social Simulation (JASSS), Journal of the Association for Information Science and Technology (JASIST), Journal of Computer-Mediated Communication (JCMC), Journal of Computational and Mathematical Organization Theory (CMOT), Journal of Information Technology & Politics (JITP), Journal of Social Entrepreneurship, Language Resources and Evaluation, Network Science, Journal of Tax Administration, Procedia - Social and Behavioral Sciences, Social Networks, Social Network Analysis and Mining (SNAM)

#### **Reviewer, Conferences (alphabetical)**

- ACM CHI (2011), IEEE Social Computing (SocComp, 2009, 2010), Americas Conference on Information Systems (AMICS, 2008, 2009), Applications of Social Network Analysis (ASNA, 2011), Business Informatics (2012), General Online Research Conference (GOR) (2010-2011,

2013), Hawaiian International Conference on System Sciences (HICSS, 2012), iConference (2013)

#### **Reviewer, Grant Proposals**

- NSF (National Science Foundation) (2014, 2018, 2019)
- NEH (National Endowment for the Humanities) (2013)
- Israel Science Foundation (2020)
- NSERC (Natural Sciences and Engineering Research Council of Canada) (2016)
- NWO (Dutch Research Council) (2015, 2018)

#### **Reviewer, Book Proposals**

- Emerald Publishing (2016)

#### **Other Service**

- Economic and Social Research Council (UKRI ESRC): New and Emerging Forms of Data: Expert working group member (2019-)

#### **Membership in Professional Organizations**

- ACM (2004 -), IEEE (2009 -), International Network for Social Network Analysis (INSNA) (2003 -)

#### **Educational Outreach and Leadership**

##### **Summary: providing leadership, service and mentoring to strengthen the voice and representation of underrepresented groups, especially women, in tech:**

- Conference Organizing Committee Member: WiDS (Women in Data Science), Urbana-Champaign (2020)
- Grace Hopper student fellowship writing workshop (2020)
- Faculty Sponsor for newly chartered UIUC ACM-W Student Chapter (2019-2020)
- Research project advisor K12 level: Senior Research Project Advisor, University of Illinois Laboratory High School (2014)
- Computational Thinking workshop for “Girls Engaged in Math & Science” (GEMS) summer camp, UIUC (2012, 2013)
- UIUC representative at National Center for Women & Information Technology – Academic Alliance (NCWIT) (since 2012)
- Organizer and leader of computer science track at annual CMU high school day (2008-2011)
- Conference Organizing Committee Member: Opportunities for undergrad research in computer science (OurCS), CMU (2011)
- Founder and leader of “Computational Thinking”, a program where middle school students learn and practice fundamental principles of computing, Pittsburgh, PA (2010-2011)
- Instructor and speaker at technical training sessions, outreach sessions and career option workshops in computing for K12 and undergrad students and instructors (since 2006)

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#### **SERVICE AND LEADERSHIP at UIUC**

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##### **Administrative Service at iSchool**

- Co-Chair, Data Science Committee (2020/21)
- Chair, Doctoral Studies Committee (2018/19, 2019/20)
- Member, Executive Committee (2015/16, 2016/17)

##### **Committee Service at iSchool**

- Curriculum Committee (2014/15, 2019/20)
- Doctoral Studies Committee (2012/13, 2013/14, 2020/21, 2021/22)
- Grievance Committee (2021/22)

- Admissions Committee (Spring 2012)

#### **Administrative & Committee Service at Illinois**

- Co-chair, Champaign Data Science User Group (2020-) (<https://www.meetup.com/CU-DSUG/>)
- Task Force on Security of COVID-19 Code in Safer Illinois: chair (2020)
- Provost's Data Management Committee: member (2017-)
- Data Science Education Task Force: member (2017-)
- Data Science Strategy Task Force: member (2017-2018)
- Data Science Steering Committee: member (2018-2019)
- Illinois Data Science Initiative (iDSI): Steering Committee member (2016-2019)
- Urban Informatics for Sustainability and Resilience Center (UrbInSuRe): Co-director of working group in algorithms, data and technology (2014-2015)
- Campus level personnel committees (2013, 2018)

#### **Organizer, Chair, or Panelist at Illinois**

- Speaker Series Organizer: "Responsible Data Science and AI", UIUC, since Fall 2021 (<https://bit.ly/3DBNXki>)
- Panel Organizer: "Creating Meaningful Impact: Opportunities for Women in the Data Science Revolution", WiDS (Women in Data Science) conference, UIUC (2020)
- Panel Organizer: Big Data Summit: "Data Governance and Responsible Computing" (2018)
- Panelist: Law and Data Science Summit: "Law Governing Data", and "Social Media" (2018)
- Panel Organizer: 2nd Data Science Day: "Data Governance" (2018)
- Panelist: Big Data Summit: "Natural Language and Text Processing" (2017, 2018)
- Organizer: Social Media Analytics Summit (2017)
- Organizer: 1st Data Science Day: Session: "Human-Centered Data Science and Social Computing" (2017)
- Panel Chair: Big Data Summit: "Natural Language Processing" (2016)
- Panel Chair: Big Data Summit: "Data Science Team Building" (2015)
- Panelist: Big Data Summit: "Big Data in Social Media" (2013)

#### **Presentations at annual iSchool Research Showcase (committee reviewed):**

- Rezapour, R., Ferronato, P., & Diesner, J. (2019). *How do Moral Values Differ in Tweets on Social Movements?* Poster. **1<sup>st</sup> best poster award**
- Mishra S., Han, K., Yang, P., Li, K., & Diesner, J. (2019). *Human-in-the-loop construction of hierarchical subject headings for computer science.* Poster.
- Jiang, M., Huang, Q., Zhang, L., Wang, X., Zhang, P., Gan, Z., Diesner, J., & Gao, J. (2019). *TIGER: Text-to-Image Grounding for image caption Evaluation.* Poster.
- Dinh, L., Sarol, J., & Diesner, J. (2019). *Testing for gender biases and gender stereotyping in long-term news coverage of female versus male named hurricanes.* Poster. **2<sup>nd</sup> best poster award**
- Dinh, L., Sarol, J., & Diesner, J. (2019). *Impact of human choices for data sources, analysis methods, and algorithm implementation on text summarization results.* Poster.
- Dinh, L., Rezapour, R., Jiang, L., & Diesner, J. (2019). *Considering transitivity and text content to assess balance in signed directed networks.* Poster.
- Chin, C., Jiang, M., & Diesner, J. (2019). *ConText: an open-source tool for network analysis of text data.* Poster.
- Avram, M., Mishra, S., Parulian, N., & Diesner, J. (2019). *Adversarial perturbations to manipulate the perception of power and influence in networks.* Poster.
- Rezapour, R., Shah, S., & Diesner, J. (2018). *Bias Mitigation of Morality Measurement through Quality-Controlled Lexicon Expansion and Evaluation.* Poster.

- LaLone, N., Dinh, L., Sarol, J., & Diesner, J. (2018). *Differences in Situational Awareness of Emergency Management depending on Information Sources and Analysis Methods*. Poster.
- Chin, C., & Diesner, J. (2018). *Practical Ethics: Regulatory Compliance for Conducting Empirical Research with Human-Centered and Text Data*. Poster.
- Diesner, J., Rezapour, R., Witt, A., Steffen, D., Bopp, J., Fiedler, N., Köller, C., Raster, M., & Wockenfuß, J. (2018). *Assessing the Impact of Grant-Funded Research on Society by using Alternatives to Bibliometric Measures*. Poster.
- Avram, M., Mishra, S., & Diesner, J. (2018). *Adversarial perturbations for identifying strategies for biasing the perceptions of power and influence in social networks*. Poster.
- Diesner, J., Jiang, M., & Narisetti, S. (2018). *Accuracy Assessment of Methods for Constructing Semantic Networks Based on Texts*. Presentation.
- Mishra, S., Fegley, B.D., Diesner, J., & Torvik, V.I. (2018). *Expertise as an aspect of author contributions*. Presentation.
- Mishra, S., & Diesner J. (2017). *Semi-supervised Named Entity Recognition in Noisy-text*. Poster.
- Chin, C., & Diesner, J. (2016). *Responsible Conduct of Research in Human Centered Data Science: Complying with Norms and Regulations*. Poster.
- Jiang, M., & Diesner, J. (2016). *Issue-Focused Documentaries Versus Other Films: Rating and Type Prediction Based on User-Authored Reviews*. Poster.
- Rezapour, R., Diesner, J. (2016). *Classification and Detection of Micro-Level Impact of Issue-Focused Films Based on Reviews*. Poster.
- Rezapour, R., Diesner, J. (2015). *Target Function Assessment for Impact Goals of Issue Focused Public Media*. Poster.
- Kim, J., Diesner, J. (2015). *Impact of Entity Resolution on Network Properties*. Poster.
- Diesner, J., Mishra, S., Tao, L., Surbeck, E., Byrne, J. (2015). *Incremental Sentiment Prediction Based on Human in the Loop Learning*. Poster.
- Diesner, J., Evans, C., & Kim, J. (2015). *Who Are They, and If So, How Many? Propagation of Entity Disambiguation Errors to Network Analysis Results*. Presentation.
- Diesner, J., Kim, J., Mishra, S., Soltani, K., Wilner, S., & Aleyasen, A. (2014). *Computational Impact Assessment of Social Justice Documentaries*. Presentation.
- Diesner, J. (2012). *How Different Methods for Relation Extraction Impact Network Analysis Results*. Presentation.