MAYANK KEJRIWAL

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EDUCATION

University of Texas – Austin, Texas **May 2016**
Ph.D. and M.Sc., Computer Science; Minor: Cognitive Science
Recipient, International Best Dissertation Award from Semantic Web Science Association (2017)

University of Illinois – Urbana-Champaign, Illinois **August 2012**
B.Sc., Computer Engineering; Dual Major: Engineering Physics
Honors: Dean's Honor List (all semesters); Chancellor's Scholar; Senior 100 Honorary

EXPERIENCE

University of Southern California – Los Angeles, CA **2016 - Current**
Principal Scientist / Research Assistant Professor (2019 – Current)
Affiliations: Center for Knowledge Graphs, AI4health

- Direct and lead the Artificial Intelligence and Complex Systems (AICS) group within the USC Information Sciences Institute and the Department of Industrial & Systems Engineering;
- Department Representative, Engineering Faculty Council (2022-2024) and Viterbi Working Group on Faculty Representation & Experience (2020-2022); Invited Member, USC Joint Office of Research and Senate Research Committee (2022-2023), USC Faculty Environment & Employment Committee (2021-2022), and Epstein Diversity, Equity, and Inclusion Committee (2021-2023);
- Mentored and supervised 20+ graduate students (M.Sc. and Ph.D.) and engineers on funded projects;
- Published ~100 peer-reviewed articles, invited pieces, and editorials in top-tier academic conferences, journals, and workshops in applied Artificial Intelligence and computational social science.

Computer Scientist (2016-2019)
Researched, developed, and applied Artificial Intelligence methods and algorithms, including for fighting human trafficking, causal inference on noisy natural language data, and crisis informatics.

HONORS AND AWARDS (2018 - CURRENT)

Recipient, ACM History and Archiving Fellowship (2025) | **Finalist,** INFORMS Innovative Applications in Analytics Award (2025) **Semi-finalist**, INFORMS Franz Edelman Award, co-entered with Kaiser Permanente (2024) | **Recipient**, Institution of Engineering and Technology Mike Sargeant Career Achievement Medal for Early Career Professionals (2022) | **40 Under 40,** Chief Data Officer Magazine (2022) | **Recipient,** SIAM Science Policy Fellowship (2022-2023) | **Recipient,** USC Award for Excellence in Mentorship (2021) | **Recipient,** USC Zumberge Diversity & Inclusion Award (2020-2021) | **Named Finalist,** AAAS Early Career Award for Public Engagement with Science (2020-2021) | **Listed** in DataEthics4All's Top 100 Diversity, Inclusion, Equity and Technology (DIET) Champions (2021) | **Recipient,** Yahoo! Faculty Research Engagement Program Award (2020) | **Recipient,** Phi Kappa Phi Love of Learning Award (2020) | **Runner-up,** Best Case Study, 6th Knowledge Management and Intellectual Capital Excellence Awards (2020) | **Recipient,** Copper Black Award for Creative Achievement (2019) | **Recipient,** Allen Institute of Artificial Intelligence Key Scientific Challenge Winner (2018)) | **Shortlist,** Forbes 30 Under 30 (Science; 2019)

RECENTLY FUNDED PROJECTS AND COLLABORATIONS

DROIDDS: Data-Efficient, Robust, Ontology Induction for Deontic-Compliant Decision Support ***Feb. 2025 - Feb. 2027***
Sponsor: Defense Advanced Research Projects Agency (DARPA)
Role: Co-Principal Investigator
Sub-contractors: University of California, Los Angeles, University of Texas, Dallas
Other collaborators: Jay Pujara (PI; USC)
Description: Research and develop a suite of tools enabling the transformation of NL-specified policies to logical forms to allow reasoners to provide high-assurance guarantees for system outputs and decisions.

Characterizing Gastrointestinal Disorder Trajectories for Autistic Sub-Groups: Machine Learning Prediction of Risk Profiles and Response to Treatment ***Aug. 2024 - Aug. 2029***
Sponsor: National Institute of Child Health and Human Development, National Institutes of Health (NIH) R01
Role: Co-Investigator
Other collaborators and organizations: Amber Angell (PI; USC Chan), Children's Hospital of Los Angeles, USC Industrial & Systems Engineering
Description: Research and develop natural language processing methods for characterizing gastrointestinal disorder trajectories for autistic sub-groups.

Combatting Human Trafficking ***Mar. 2023 - Dec. 2025***
Sponsor: Private donor
Role: Principal Investigator
Description: Research and develop network science and computational social science methods for understanding the drivers behind human trafficking.

Multi-modal Open World Grounded Learning and Inference ***Aug. 2019 - Aug. 2025***
Sponsor: Defense Advanced Research Projects Agency (DARPA)
Role: Principal Investigator
Sub-contractors: Massachusetts Institute of Technology (PI: Henry Lieberman), Stanford University (PI: Jure Leskovec), Rensselaer Polytechnic Institute (PI: Deborah McGuinness), University of California at Irvine (PI: Sameer Singh)
Other collaborators: Jay Pujara (co-PI; USC), Pedro Szekely (previous; now at Amazon)
Description: Research and develop theories, methods, and algorithms for developing multi-modal Artificial Intelligence capable of robust and humanlike commonsense reasoning.

Building a Healthcare Knowledge Graph ***Feb. 2022 - Feb. 2024***
Sponsor: Kaiser Permanente
Role: Principal Investigator (PI)
Description: Research, develop, and implement a healthcare knowledge graph infrastructure on Kaiser Permanente's data to enable a broad suite of intelligent applications, such as a recommendation system for health news, and a richer Web search engine for finding doctors and locations.

Generating Novelty in Open-world Multi-agent Environments ***Dec. 2019 - Jun. 2023***
Sponsor: Defense Advanced Research Projects Agency (DARPA)
Role: Principal Investigator
Sub-contractor: Purdue University (Principal Investigator: Bharat Bhargava)
Description: Research and develop theories and methods for evaluating Artificial Intelligence agents in open-world environments where unexpected events or "novelties" can occur without warning.

A Global Study of Inclusion Correlates ***Aug. 2020 - Sep. 2021***
Sponsor: James H. Zumberge Faculty Research and Innovation Fund for Diversity and Inclusion (D&I)

Role: Principal Investigator
Co-Investigator: Kristina Lerman (co-PI; USC)
Description: Investigate factors driving, and influenced by, higher diversity and inclusion in culture (e.g., literary text and media representation), academia, and industry innovation by collating Gallup surveys and public data.

A COVID-19 Knowledge Graph Infrastructure for Assistive Expertise ***Jul. 2020 - Feb. 2021***
Sponsor: Microsoft COVID-19 AI for Health
Role: Principal Investigator
Description: Investigate the design, implementation, and use of knowledge graphs for providing assistive expertise to policy makers, scientists, and doctors in the context of COVID-19.

THOR: Text-enabled Humanitarian Operations in Real-time ***Jun. 2016 - Jan. 2020***
Sponsor: Defense Advanced Research Projects Agency (DARPA)
Role: Principal Investigator (Sub-contractor)
Collaborator: Next Century Corporation (Prime)
Description: Research and develop machine learning and data mining algorithms for detecting needs (and other 'situation' labels), urgency levels, consequential events, and duplicate entities in social media and messaging data streaming into a crisis response system during a humanitarian crisis.

BOOKS

- Kejriwal, M. (December, 2022). *Artificial Intelligence for Industries of the Future*. Heidelberg: Springer.
- Kejriwal, M., Knoblock, C., and Szekely, P (2021). *Knowledge Graphs: Fundamentals, Techniques & Applications*. MIT Press.
- Kejriwal, M. (2019). *Domain-Specific Knowledge Graph Construction*. Heidelberg: Springer.
- Kejriwal, M. (2016). *Populating a Linked Data Entity Name System: A Big Data Solution to Unsupervised Instance Matching* (Vol. 27). IOS Press.

BOOK CHAPTERS

- Yidan Sun and Mayank Kejriwal. 2024. A Study of Firm-Switching of Inventors in Big Tech Using Public Patent Data. In *Social Network Analysis and Mining Applications in Healthcare and Anomaly Detection*. Springer.
- Mayank Kejriwal. 2023. Named Entity Resolution in Personal Knowledge Graphs. In *Personal Knowledge Graphs: Methodology, tools and applications*. The Institution of Engineering and Technology. Editors: Sanju Tiwari, Francois Scharffe, Fernando Ortiz-Rodriguez, Manas Gaur.
- Trevor Bonjour, Marina Haliem, Mayank Kejriwal, and Bharat Bhargava. 2023. Multi- agent Game Domain: Monopoly. In *A Unifying Framework for Formal Theories of Novelty: Discussions, Guidelines, and Examples for Artificial Intelligence*. Springer Nature Switzerland Cham, 97–105. Editors: Terrance Boult, Walter Scheirer.
- Mayank Kejriwal and Ke Shen. 2023. A Lightweight Global Taxonomy Induction System for E-Commerce Concept Labels. In *Cyber Security and Social Media Applications*. Springer Nature Switzerland Cham, 99–114. Editors: Sibel Tarıyan Özyer, Buket Kaya.
- Mayank Kejriwal. 2022. Knowledge Graphs: Constructing, Completing, and Effectively Applying Knowledge Graphs in Tourism. In *Applied Data Science in Tourism: Interdisciplinary Approaches, Methodologies, and Applications*. Springer International Publishing Cham, 423–449. Editor: Roman Egger.
- Mayank Kejriwal, Ravi Kiran Selvam, Chien-Chun Ni, and Nicolas Torzec. 2022. Local Taxonomy Construction: An Information Retrieval Approach Using Representation Learning. In *Social Media Analysis for Event Detection*. Springer International Publishing Cham, 133–161. Editor: Tansel Ozyer.
- Mayank Kejriwal and Peilin Zhou. 2021. Visual Exploration and Debugging of Machine Learning Classification over Social Media Data. In *Big Data and Social Media Analytics: Trending Applications*, 153–166. Editors: Mehmet Çakırtaş, Kemal Ozdemir.

- Mayank Kejriwal. 2020. Domain-specific search engines for investigating human trafficking and other illicit activities. In *Encyclopedia of Criminal Activities and the Deep Web*. IGI Global, 478–496.
- Mayank Kejriwal. 2020. Smart Cities. In *Handbook of Big Geospatial Data*. Springer International Publishing Cham, 563–587. Editors: Martin Werner, Yao-Yi Chiang.

JOURNAL ARTICLES

2025

- Yidan Sun, Ke Shen, and Mayank Kejriwal. 2025. Backlash or reinforcement? Donald Trump's 2017 inauguration and shifting climate beliefs in United States. Nature Partner Journals (NPJ) Climate Action 4.1 (2025): 26. **SJR Quartile: Q1**

2024

- Shafkat Islam, Min-Hsueh Chiu, Trevor Bonjour, Ruy de Oliveira, Bharat Bhargava, and Mayank Kejriwal. A Q-learning Novelty Search Strategy for Evaluating Robustness of Deep Reinforcement Learning in Open-world Environments. IEEE Intelligent Systems (2024). **Acceptance Factor: 15%; SJR Quartile: Q1; Impact Factor: 5.6;**
- Navapat Nananukul, Ke Shen, and Mayank Kejriwal. The plausibility machine commonsense (PMC) dataset: A massively crowdsourced human-annotated dataset for studying plausibility in large language models. Data in Brief 57 (2024): 110869. **SJR Quartile: Q3; Impact Factor: 1.2**
- Navapat Nananukul, Khanin Sisaengsuwanchai, and Mayank Kejriwal. Cost-efficient prompt engineering for unsupervised entity resolution in the product matching domain. Discover Artificial Intelligence 4.1 (2024): 56.
- Mayank Kejriwal, Henrique Santos, Ke Shen, Alice M Mulvehill, and Deborah L McGuinness. 2024. A noise audit of human-labeled benchmarks for machine commonsense reasoning. Scientific Reports 14, 1 (2024), 8609. **Acceptance rate: 48%; SJR Quartile: Q1; Impact Factor: 4.4**
- Mayank Kejriwal and Akarsh Nagaraj. 2024. Quantifying Gender Disparity in Pre-Modern English Literature using Natural Language Processing. Journal of Data Science 22, 1 (2024).
- Henrique Santos, Ke Shen, Alice M Mulvehill, Mayank Kejriwal, and Deborah L McGuinness. 2024. A Theoretically Grounded Question Answering Data Set for Evaluating Machine Common Sense. Data Intelligence 6, 1 (2024), 1–28. **Acceptance Rate: 21%; SJR Quartile: Q1; Impact Factor: 3.9**

2023

- Zhisheng Tang and Mayank Kejriwal. 2023. Evaluating deep generative models on cognitive tasks: a case study. Discover Artificial Intelligence 3, 1 (2023), 21.
- Ke Shen and Mayank Kejriwal. 2023. Quantifying confidence shifts in a BERT-based question answering system evaluated on perturbed instances. Plos one 18, no. 12 (2023): e0295925. **Acceptance Rate: 30.75%; SJR Quartile: Q1; Impact Factor: 3.7**
- Zhisheng Tang and Mayank Kejriwal. 2023. Can language representation models think in bets? Royal Society Open Science 10, 3 (2023), 221585. **SJR Quartile: Q1; Impact Factor: 3.5.**
- Using conditional inference to quantify interaction effects of socio-demographic covariates of US COVID-19 vaccine hesitancy. PLOS Global Public Health 3, 5 (2023), e0001151.
- Ke Shen and Mayank Kejriwal. 2023. Quantifying COVID-19 policy impacts on subjective well-being during the early phase of the pandemic: A cross-sectional analysis of United States survey data from March to August 2020. Plos one 18, 9 (2023), e0291494. **Acceptance Rate: 30.75%; SJR Quartile: Q1; Impact Factor: 3.7**
- Henrique Santos, Alice M Mulvehill, Ke Shen, Mayank Kejriwal, and Deborah L McGuinness. 2023. TG-CSR: A human-labeled dataset grounded in nine formal commonsense categories. Data in Brief 51 (2023), 109666. **SJR Quartile: Q3; Impact Factor: 1.2**

- Ke Shen and Mayank Kejriwal. 2023. An experimental study measuring the generalization of fine-tuned language representation models across commonsense reasoning benchmarks. Expert Systems 40, 5 (2023), e13243. **SJR Quartile: Q2; Impact Factor: 2.81**

2022

- Mayank Kejriwal, Henrique Santos, Alice M Mulvehill, and Deborah L McGuinness. 2022. Designing a strong test for measuring true common-sense reasoning. Nature Machine Intelligence 4, 4 (2022), 318–322. **SJR Quartile: Q1; Impact Factor: 23.8**
- Trevor Bonjour, Marina Haliem, Aala Alsalem, Shilpa Thomas, Hongyu Li, Mayank Kejriwal, and Bharat Bhargava. 2022. Decision making in monopoly using a hybrid deep reinforcement learning approach. IEEE Transactions on Emerging Topics in Computational Intelligence 6, 6 (2022), 1335–1344. **Acceptance Rate: 19.5%; SJR Quartile: Q1; Impact Factor: 5.3.**
- Minda Hu and Mayank Kejriwal. 2022. Measuring spatio-textual affinities in twitter between two urban metropolises. Journal of Computational Social Science 5, 1 (2022), 227–252. **SJR Quartile: Q2; Impact Factor: 3.2**
- Mayank Kejriwal. 2020. Knowledge graphs and COVID-19: opportunities, challenges, and implementation. Harv. Data Sci. Rev 11 (2020), 300.
- Sara Melotte and Mayank Kejriwal. 2022. Predicting zip code-level vaccine hesitancy in US Metropolitan Areas using machine learning models on public tweets. PLOS Digital Health 1, 4 (2022), e0000021.
- Mayank Kejriwal, Ke Shen, Chien-Chun Ni, and Nicolas Torzec. 2022. Transfer-based taxonomy induction over concept labels. Engineering Applications of Artificial Intelligence 108 (2022), 104548. **Acceptance Rate: 15%; SJR quartile: Q1; Impact factor: 8**
- Akarsh Nagaraj and Mayank Kejriwal. 2022. Dataset for studying gender disparity in English literary texts. Data in Brief 41 (2022), 107905. **SJR Quartile: Q3; Impact Factor: 1.2**

2021

- Mayank Kejriwal, Qile Wang, Hongyu Li, and Lu Wang. An empirical study of emoji usage on Twitter in linguistic and national contexts. Online Social Networks and Media 24 (2021): 100149. **CiteScore: 8.6**
- Mayank Kejriwal. 2021. Link prediction between structured geopolitical events: Models and experiments. Frontiers in Big Data 4 (2021), 779792. **SJR Quartile: Q2; Impact Factor: 3.1**
- Mayank Kejriwal, Ke Shen, Chien-Chun Ni, and Nicolas Torzec. 2021. An evaluation and annotation methodology for product category matching in e-commerce. Computers in Industry 131 (2021): 103497. **SJR Quartile: Q1; Impact Factor: 10**
- Henrique Santos, Mayank Kejriwal, Alice M Mulvehill, Gretchen Forbush, Deborah L McGuinness, and Adín Ramírez Rivera. 2021. An experimental study measuring human annotator categorization agreement on commonsense sentences. Cambridge University Press. Experimental Results 2 (2021), e19.
- Mayank Kejriwal and Shilpa Thomas. 2021. A multi-agent simulator for generating novelty in monopoly. Simulation Modelling Practice and Theory 112 (2021), 102364. **SJR Quartile: Q1; Impact Factor: 4.2**
- Mayank Kejriwal. 2021. A meta-engine for building domain-specific search engines. Software Impacts 7 (2021), 100052. **SJR Quartile: Q3; Impact Factor: 2.1**
- Mayank Kejriwal. 2021. On using centrality to understand importance of entities in the Panama Papers. Plos one 16, 3 (2021), e0248573. **Acceptance rate: 30.75%; Impact Factor: 3.7; SJR quartile: Q1**
- Mayank Kejriwal. 2021. Unsupervised DNF blocking for efficient linking of knowledge graphs and tables. Information 12, 3 (2021), 134. **SJR Quartile: Q2; Impact Factor: 3.1**
- Minda Hu, Ashwin Rao, Mayank Kejriwal, and Kristina Lerman. 2021. Socioeconomic correlates of anti-science attitudes in the US. Future Internet 13, 6 (2021), 160. **SJR Quartile: Q2; Impact Factor: 3.4**
- Sara Melotte and Mayank Kejriwal. 2021. A geo-tagged COVID-19 Twitter dataset for 10 North American metropolitan areas over a 255-day period. Data 6, 6 (2021), 64. **SJR Quartile: Q2; Impact Factor: 2.6**

2020

- Mayank Kejriwal and Akarsh Dang. 2020. Structural studies of the global networks exposed in the Panama papers. Applied Network Science 5 (2020), 1–24. **SJR Quartile: Q1; Impact Factor: 2.2**
- Mayank Kejriwal and Yao Gu. 2020. Network-theoretic modeling of complex activity using UK online sex advertisements. Applied Network Science 5, 1 (2020), 30. **SJR Quartile: Q1; Impact Factor: 2.2**
- Mayank Kejriwal and Peilin Zhou. 2020. On detecting urgency in short crisis messages using minimal supervision and transfer learning. Social Network Analysis and Mining 10, 1 (2020), 58. **SJR Quartile: Q1; Impact Factor: 2.8**

2015-2019

- Mayank Kejriwal and Daniel P Miranker. 2015. An unsupervised instance matcher for schema-free RDF data. Journal of Web Semantics 35 (2015), 102–123. **SJR Quartile: Q2; Impact Factor: 2.5**
- Mayank Kejriwal and Pedro Szekely. 2017. Knowledge graphs for social good: An entity-centric search engine for the human trafficking domain. IEEE Transactions on Big Data 8, 3 (2017), 592–606. **SJR Quartile: Q1; Impact Factor: 7.2**
- Mayank Kejriwal and Pedro Szekely. 2017. Scalable generation of type embeddings using the abox. Open Journal of Semantic Web (OJSW) 4, 1 (2017), 20–34.
- Daye Nam and Mayank Kejriwal. 2018. How do organizations publish semantic markup? three case studies using public schema. org crawls. IEEE Computer 51, 6 (2018), 42–51. **SJR Quartile: Q1; Impact Factor: 2.2**
- Mayank Kejriwal, Pedro Szekely, and Craig Knoblock. 2018. Investigative knowledge discovery for combating illicit activities. IEEE Intelligent Systems 33, 1 (2018), 53–63. **SJR Quartile: Q1; Impact Factor: 6.4**
- Mayank Kejriwal and Pedro Szekely. 2019. myDIG: Personalized illicit domain-specific knowledge discovery with no programming. Future Internet 11, 3 (2019), 59. **SJR Quartile: Q2; Impact Factor: 3.4**
- Mayank Kejriwal and Yao Gu. 2019. A pipeline for rapid post-crisis twitter data acquisition, filtering and visualization. Technologies 7, 2 (2019), 33. **SJR Quartile: Q2; Impact Factor: 3.6**
- Mayank Kejriwal and Rahul Kapoor. 2019. Network-theoretic information extraction quality assessment in the human trafficking domain. Applied Network Science 4, 1 (2019), 1–26. **SJR Quartile: Q1; Impact Factor: 2.2**

CONFERENCE PUBLICATIONS (ARCHIVAL)

2025

- Mayank Kejriwal, Deborah L. McGuinness, and Henry Lieberman. Commonsense AI in the History of the Web. In Proceedings of the ACM Web Conference (History Track), April 2025, Sydney, NSW, Australia. ACM.
- Cole Gawin, Yidan Sun, and Mayank Kejriwal. Navigating Semantic Relations: Challenges for Language Models in Abstract Common-Sense Reasoning. In Proceedings of the ACM Web Conference Companion, April 28–May 2, 2025, Sydney, NSW, Australia. ACM.

2024

- Xiyao Cheng, Lakshmi Srinivas Edara, Yuanxun Zhang, Mayank Kejriwal, and Prasad Calyam. Influence Role Recognition and LLM-Based Scholar Recommendation in Academic Social Networks. In *Proceedings of the 2024 IEEE 11th International Conference on Data Science and Advanced Analytics (DSAA)*, October 6–9, 2024, San Diego, California, USA. IEEE.
- Navapat Nananukul and Mayank Kejriwal. Balancing Efficiency and Quality in LLM-Based Entity Resolution on Structured Data. In *Proceedings of the 2024 IEEE/ACM International Conference on*

Advances in Social Networks Analysis and Mining (ASONAM), September 2–5, 2024, Rende, Italy. IEEE/ACM.

- Yongyi Ji, Zhisheng Tang, and Mayank Kejriwal. Is Persona Enough for Personality? Using ChatGPT to Reconstruct an Agent's Latent Personality from Simple Descriptions. In *Proceedings of the ICML 2024 Workshop on Large Language Models and Cognition*, July 2024, Vienna, Austria.
- Mayank Kejriwal, Hamid Haidarian, Min-Hsueh Chiu, Andy Xiang, Deep Shrestha, and Faizan Javed. 2024. A Semantic Search Engine for Helping Patients Find Doctors and Locations in a Large Healthcare Organization. (To Appear) In Proceedings of the 47th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR '24), July 14–18, 2024, Washington, DC, USA. ACM, New York, NY, USA, 5 pages. **Acceptance rate: 34%**
- Navapat Nananukul, Mayank Kejriwal. HALO: An Ontology for Representing Hallucinations in Generative Models. (To Appear) In Proceedings of the International Society for Optics and Photonics (SPIE), April 21-25, 2024, National Harbor, Maryland, USA. SPIE. 15 pages.

2023

- Xiyao Cheng, Yuanxun Zhang, Harsh Joshi, Mayank Kejriwal, and Prasad Calyam. 2023. Knowledge Graph-based Embedding for Connecting Scholars in Academic Social Networks. In 2023 IEEE 10th International Conference on Data Science and Advanced Analytics (DSAA). IEEE, 1–10. **Acceptance rate: 25%**
- Min-Hsueh Chiu and Mayank Kejriwal. 2023. A Model and Structural Analysis of Networked Bitcoin Transaction Flows. In International Conference on Complex Networks and Their Applications. Springer Nature Switzerland Cham, 456–467. **Acceptance rate: 35%**
- Yidan Sun and Mayank Kejriwal. 2023. DeepGraph: Multi-Cluster Interactive Visualization of Complex Networks in a Learned Representation Space. In Proceedings of the International Conference on Advances in Social Networks Analysis and Mining. 427–430. **Acceptance rate: 37%**
- Yidan Sun and Mayank Kejriwal. 2023. A structural study of Big Tech firm-switching of inventors in the post-recession era. In Proceedings of the International Conference on Advances in Social Networks Analysis and Mining. 670–677. **Acceptance rate: 37%**
- Ke Shen and Mayank Kejriwal. 2023. Substructure Discovery in Commonsense Relations Using Graph Representation Learning. In Intelligent Systems Conference. Springer Nature Switzerland Cham, 714–734.
- Mayank Kejriwal, Henrique Santos, Ke Shen, Alice M Mulvehill, and Deborah L McGuinness. 2023. Context-Rich Evaluation of Machine Common Sense. In International Conference on Artificial General Intelligence. Springer Nature Switzerland Cham, 167–176.
- Zhisheng Tang, and Mayank Kejriwal. 2023. Can Language Models Be Used in Multistep Commonsense Planning Domains? In International Conference on Artificial General Intelligence (pp. 276-285). Cham: Springer Nature Switzerland.
- Ke Shen and Mayank Kejriwal. An Analytical Approximation of Simplicial Complex Distributions in Communication Networks. International Conference on Complex Networks and Their Applications. Cham: Springer Nature Switzerland, 2023. **Acceptance rate: 35%**
- Xinyu Liu, Tiancheng Sun, Diantian Fu, Zijue Li, Sheng Qian, Ruyue Meng, and Mayank Kejriwal. 2023. Automatic Semantic Typing of Pet E-commerce Products Using Crowdsourced Reviews: An Experimental Study. In Iberoamerican Knowledge Graphs and Semantic Web Conference. Springer Nature Switzerland Cham, 151–167. **Acceptance rate: 33%**

2020-2022

- Mayank Kejriwal and Yuesheng Luo. 2022. On the empirical association between trade network complexity and global gross domestic product. In International Conference on Complex Networks and Their Applications. Springer International Publishing Cham, 456–466. **Acceptance rate: 35%**

- Mayank Kejriwal. 2022. A Pedagogical Framework for Understanding the Alignment Between Classroom Project Evaluations and Real-World Industry Requirements. In 2022 ASEE Annual Conference & Exposition.
- Yuesheng Luo and Mayank Kejriwal. 2022. Understanding COVID-19 vaccine reaction through comparative analysis on twitter. In Science and Information Conference. Springer International Publishing Cham, 846–864.
- Ke Shen and Mayank Kejriwal, 2021. On the generalization abilities of fine-tuned commonsense language representation models. In Artificial Intelligence XXXVIII: 41st SGAI International Conference on Artificial Intelligence, AI 2021, Cambridge, UK, December 14–16, 2021, Proceedings 41 (pp. 3-16). Springer International Publishing. **Winner of Best Refereed Technical Paper Award.**
- Kejriwal, Mayank, Selvam, Ravi Kiran, Ni, Chien-Chun, and Torzec, Nicolas. 2021. Empirical Best Practices On Using Product-Specific Schema.org. In Proceedings of the AAAI Conference on Artificial Intelligence. 35, 17 (May 2021), 15452-15457. DOI:https://doi.org/10.1609/aaai.v35i17.17816. **Acceptance rate: 21.4%**

2012-2019

- Liana Diesendruck, Luigi Marini, Rob Kooper, Mayank Kejriwal, and Kenton McHenry. 2012. Digitization and search: A non-traditional use of hpc. In 2012 IEEE 8th International Conference on E-Science. IEEE, 1-6. **Acceptance rate: 31.2%**
- Liana Diesendruck, Luigi Marini, Rob Kooper, Mayank Kejriwal, and Kenton McHenry. 2012. A framework to access handwritten information within large digitized paper collections. In 2012 IEEE 8th International Conference on E-Science. IEEE, 1-10. **Acceptance rate: 31.2%**
- Mayank Kejriwal and Daniel P Miranker. 2013. An unsupervised algorithm for learning blocking schemes. In 2013 IEEE 13th International Conference on Data Mining. IEEE, 340–349. **Acceptance rate: 9.8%**
- Zihao Zhou, Mayank Kejriwal, and Risto Miikkulainen. 2013. Extended scaled neural predictor for improved branch prediction. In The 2013 International Joint Conference on Neural Networks (IJCNN). IEEE, 1–7. **Acceptance rate: 66%**
- Aibo Tian, Mayank Kejriwal, and Daniel P Miranker. 2014. Schema matching over relations, attributes, and data values. In Proceedings of the 26th International Conference on Scientific and Statistical Database Management. 1–12. **Acceptance rate: 37%**
- Mayank Kejriwal. 2014. Populating entity name systems for big data integration. In *The Semantic Web–ISWC 2014: 13th International Semantic Web Conference, Riva del Garda, Italy, October 19-23, 2014. Proceedings, Part II* 13 (pp. 521-528). Springer International Publishing. **Acceptance rate: 21.1%**
- Mayank Kejriwal. 2015. Entity resolution in a big data framework. In Proceedings of the AAAI Conference on Artificial Intelligence, Vol. 29. **Acceptance rate: 26.7%**
- Mayank Kejriwal, Qiaoling Liu, Ferosh Jacob, and Faizan Javed. 2015. A pipeline for extracting and deduplicating domain-specific knowledge bases. In 2015 IEEE International Conference on Big Data (Big Data). IEEE, 1144–1153. **Acceptance rate: 16.8%**
- Mayank Kejriwal and Daniel P Miranker. 2015. Decision-making bias in instance matching model selection. In The Semantic Web-ISWC 2015: 14th International Semantic Web Conference, Bethlehem, PA, USA, October 11-15, 2015, Proceedings, Part I 14. Springer International Publishing, 392–407. **Acceptance rate: 22.1%**
- Mayank Kejriwal and Daniel P Miranker. 2015. Semi-supervised instance matching using boosted classifiers. In The Semantic Web. Latest Advances and New Domains: 12th European Semantic Web Conference, ESWC 2015, Portoroz, Slovenia, May 31–June 4, 2015. Proceedings 12. Springer International Publishing, 388–402. **Acceptance rate: 22.8%**
- Mayank Kejriwal and Pedro Szekely. 2017. Information extraction in illicit web domains. In Proceedings of the 26th international conference on world wide web. 997–1006. **Acceptance rate: 17%**
- Mayank Kejriwal and Pedro Szekely. 2017. An investigative search engine for the human trafficking domain. In The Semantic Web–ISWC 2017: 16th International Semantic Web Conference, Vienna, Austria, October 21-25, 2017, Proceedings, Part II 16. Springer International Publishing, 247–262. **Acceptance rate: 28.3%**

- Mayank Kejriwal and Pedro Szekely. 2017. Neural embeddings for populated geonames locations. In The Semantic Web–ISWC 2017: 16th International Semantic Web Conference, Vienna, Austria, October 21-25, 2017, Proceedings, Part II 16. Springer International Publishing, 139–146. **Acceptance rate: 28.3%**
- Mayank Kejriwal and Pedro Szekely. 2018. Constructing domain-specific search engines with no programming. In Proceedings of the AAAI Conference on Artificial Intelligence, Vol. 32. **Acceptance rate: 24.6%**
- Kyle Hundman, Thamme Gowda, Mayank Kejriwal, and Benedikt Boecking. 2018. Always lurking: Understanding and mitigating bias in online human trafficking detection. In Proceedings of the 2018 AAAI/ACM Conference on AI, Ethics, and Society. 137-143. **Acceptance rate: 38%**
- Mayank Kejriwal, Daniel Gilley, Pedro Szekely, and Jill Crisman. 2018. Thor: Text-enabled analytics for humanitarian operations. In Companion Proceedings of The Web Conference 2018. 147–150. **Acceptance rate: 15%**
- Mayank Kejriwal, Jing Peng, Haotian Zhang, and Pedro Szekely. 2018. Structured event entity resolution in humanitarian domains. In The Semantic Web–ISWC 2018: 17th International Semantic Web Conference, Monterey, CA, USA, October 8–12, 2018, Proceedings, Part I 17. Springer International Publishing, 233–249. **Acceptance rate: 25.2%**
- Mayank Kejriwal, Runqi Shao, and Pedro Szekely. 2019. Expert-guided entity extraction using expressive rules. In Proceedings of the 42nd international ACM SIGIR conference on research and development in information retrieval. 1353–1356. **Acceptance rate: 20%**
- Mayank Kejriwal and Peilin Zhou. 2019. SAVIZ: Interactive exploration and visualization of situation labeling classifiers over crisis social media data. In Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining. 705–708. **Acceptance rate: 14%**
- Mayank Kejriwal and Peilin Zhou. 2019. Low-supervision urgency detection and transfer in short crisis messages. In Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining. 353–356. **Acceptance rate: 14%**
- Shuo Zhang and Mayank Kejriwal. 2019. Concept drift in bias and sensationalism detection: an experimental study. In Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining. 601–604. **Acceptance rate: 14%**

SELECTED NON-ARCHIVAL PUBLICATIONS (WORKSHOPS, POSTERS AND PREPRINTS)

- Adin Aberbach, Mayank Kejriwal, and Ke Shen. 2024. Multipartite Entity Resolution: Motivating a K-Tuple Perspective (Student Abstract). In Proceedings of the AAAI Conference on Artificial Intelligence, Vol. 38. 23434–23435.
- Prasad Calyam, Mayank Kejriwal, Praveen Rao, Jianlin Cheng, Weichao Wang, Linquan Bai, V Sriram Siddhardh Nadendla, Sanjay Madria, Sajal K Das, Rohit Chadha, et al. 2023. Towards a Domain-Agnostic Knowledge Graph-as-a-Service Infrastructure for Active Cyber Defense with Intelligent Agents. In 2023 IEEE Applied Imagery Pattern Recognition Workshop (AIPR). IEEE, 1–8.
- Katarina Doctor, Christine Task, Eric Kildebeck, Mayank Kejriwal, Lawrence Holder, and Russell Leong. 2023. Toward defining a domain complexity measure across domains. arXiv preprint arXiv:2303.04141 (2023).
- Katarina Doctor, Mayank Kejriwal, Lawrence Holder, Eric Kildebeck, Emma Resmini, Christopher Pereyda, Robert J Steininger, and Daniel V Olivença. 2023. Understanding and Estimating Domain Complexity Across Domains. arXiv preprint arXiv:2312.13487 (2023).
- Mayank Kejriwal. 2023. Knowledge Graphs: A Unified Framework for Data-Intensive Collective Problem-Solving. In 2023 Spring Western Sectional Meeting. AMS.
- Mayank Kejriwal. 2023. Designing artificial intelligence for open worlds. In 2023 Annual Meeting. AAAS.
- Mayank Kejriwal, Ge Fang, and Ying Zhou. 2021. A feasibility study of open-source sentiment analysis and text classification systems on disaster-specific social media data. In 2021 IEEE Symposium Series on Computational Intelligence (SSCI). IEEE, 1–8.
- Marina Haliem, Trevor Bonjour, Aala Alsalem, Shilpa Thomas, Hongyu Li, Vaneet Aggarwal, Bharat Bhargava, and Mayank Kejriwal. 2021. Learning monopoly gameplay: A hybrid model-free deep reinforcement learning and imitation learning approach. arXiv preprint ArXiv:2103.00683 (2021).

- Jiayuan Ding and Mayank Kejriwal. 2020. An experimental study of the effects of position bias on emotion cause extraction. arXiv preprint arXiv:2007.15066 (2020).
- Mayank Kejriwal and Pedro A Szekely. 2019. Co-LOD: Continuous Space Linked Open Data. In ISWC (Satellites). 333–337. **Winner of best paper award.**
- Mozhdeh Gheini and Mayank Kejriwal. 2019. Unsupervised Product Entity Resolution using Graph Representation Learning. In eCOM@ SIGIR.
- Pedro Szekely and Mayank Kejriwal. 2018. Domain-specific insight graphs (DIG). In Companion Proceedings of the The ACM Web Conference 2018. 433–434.
- Mayank Kejriwal and Pedro Szekely. 2018. Technology-assisted investigative search: A case study from an illicit domain. In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems. 1–9.
- Yolanda Gil, Ke-Thia Yao, Varun Ratnakar, Daniel Garijo, Greg Ver Steeg, Pedro Szekely, Rob Brekelmans, Mayank Kejriwal, Fanghao Luo, and I-Hui Huang. 2018. P4ML: A phased performance-based pipeline planner for automated machine learning. In AutoML Workshop at ICML, Vol. 24.
- Mayank Kejriwal. 2017. Populating a linked data entity name system. AI Matters 3, 2 (2017), 22-23.
- Mayank Kejriwal, Suzanne A Pierce, Perry Ivan Quinto Houser, Scott Dale Peckham, Zachary Stanko, Daniel Hardesty Lewis, Yolanda Gil, Deana D Pennington, Craig Knoblock, and Daniel Garijo. 2017. Semi-automatic Data Integration using Karma. In 2017 AGU Fall Meeting. AGU.
- Rahul Kapoor, Mayank Kejriwal, and Pedro Szekely. 2017. Using contexts and constraints for improved geotagging of human trafficking webpages. In Proceedings of the fourth international ACM workshop on managing and mining enriched geo-spatial data. 1-6.
- Mayank Kejriwal. 2017. Predicting role relevance with minimal domain expertise in a financial domain. In Proceedings of the 3rd International Workshop on Data Science for Macro–Modeling with Financial and Economic Datasets. 1–2.
- Mayank Kejriwal, Jiayuan Ding, Runqi Shao, Anoop Kumar, and Pedro Szekely. 2017. Flagit: A system for minimally supervised human trafficking indicator mining. arXiv preprint arXiv:1712.03086 (2017).
- Mayank Kejriwal. 2017. Adaptive Candidate Generation for Scalable Edge-Discovery Tasks on Data Graphs. *MLG Workshop held at ACM KDD Conference*, in Halifax, Canada.
- Janani Balaji, Faizan Javed, Mayank Kejriwal, Chris Min, Sam Sander, and Ozgur Ozturk. 2016. An ensemble blocking scheme for entity resolution of large and sparse datasets. arXiv preprint arXiv:1609.06265 (2016).
- Mayank Kejriwal and Daniel P Miranker. 2016. Local, domain-independent heuristics for the FEIII challenge: Lessons and observations. In Proceedings of the Second International Workshop on Data Science for Macro-Modeling. 1–2.
- Mayank Kejriwal and Daniel P Miranker. 2015. Minimally supervised instance matching: An alternate approach. In The Semantic Web: ESWC 2015 Satellite Events: ESWC 2015 Satellite Events, Portorož, Slovenia, May 31–June 4, 2015, Revised Selected Papers 12. Springer International Publishing, 72–76.
- Mayank Kejriwal and Daniel P Miranker. 2015. Sorted neighborhood for schema-free RDF data. *The 4th Knowledge Discovery and Data Mining meets Linked Open Data Workshop.* In The *Semantic Web: ESWC 2015 Satellite Events: ESWC 2015 Satellite Events,* Portorož, Slovenia, May 31–June 4, 2015. **Winner of best paper award.**
- Mayank Kejriwal and Daniel P Miranker. 2015. On the complexity of sorted neighborhood. arXiv preprint arXiv:1501.01696 (2015).
- Mayank Kejriwal and Daniel P Miranker. 2014. A two-step blocking scheme learner for scalable link discovery. In ISWC OM Workshop.

EDITORIALS, WHITEPAPERS AND INVITED CONTRIBUTIONS

- Mayank Kejriwal, Henrique Santos, Alice M. Mulvehill, Ke Shen, Deborah L. McGuinness, and Henry Lieberman. Can AI have common sense? Finding out will be key to achieving machine intelligence. *Nature* 634, no. 8033 (2024): 291-294.
- Mayank Kejriwal, Eric Kildebeck, Robert Steininger, and Abhinav Shrivastava. Challenges, evaluation and opportunities for open-world learning. *Nature Machine Intelligence* 6, no. 6 (2024): 580-588.

- Mayank Kejriwal and Victoria Petryshyn. Advancing computational sustainability in higher education. *Nature Computational Science* 4.6 (2024): 382-383.
- Mayank Kejriwal (2024). Designing Social Good Semantic Computing Architectures for the Long Tail: Case Studies, Evaluation, and Challenges. Invited Position Paper in *2024 IEEE 18th International Conference on Semantic Computing (ICSC). IEEE*, 253–260.
- Mayank Kejriwal (2023). Editorial: Special Issue on Artificial Intelligence and Complex Systems. 11153.
- Mayank Kejriwal. (2022). On Preparing for the Future of Work through Proactively Inclusive Lifelong Learning Frameworks. *AAAS Science & Diplomacy.* https://doi.org/10.1126/scidip.ade6802.
- Mayank Kejriwal (2022). COVID-19 and computational sciences: data variety can be an enabler for good science—if properly utilized. *Science-Policy Brief for the Multistakeholder Forum on Science, Technology and Innovation for the SDGs.* URL: https://sdgs.un.org/sites/default/files/2022-05/3.1.3-53-Kejriwal -COVID19 and computational sciences.pdf
- Mayank Kejriwal (2021). Essential Features in a Theory of Context for Enabling Artificial General Intelligence. *Applied Sciences*, *11*(24), 11991.
- Mayank Kejriwal and Shilpa Thomas (2021). Reinforcing robustness of ai agents to open-world novelty: Challenges and roadmap. Academia Letters, 2.
- Cyrus Hodes, Nikki Iliadis, and Kejriwal, Mayank (2021). Using AI and Virtual Reality/Augmented Reality to Deliver Tailored and Effective Jobs Training. *Day One Project. Policy Whitepaper.* URL: https://uploads.dayoneproject.org/2021/07/07112152/augmented-jobs.pdf.
- Mayank Kejriwal (2021). Reclaiming My Name. *Science*, *372*(6547), 1238-1238.
- Mayank Kejriwal (2021). Applying AI in the Fight Against Modern Slavery Workshop. *Computing Community Consortium / Code 8.7 Report.* URL: https://cra.org/ccc/wp-content/uploads/sites/2/2021/06/CCC-Code-8-7-Report-Final.pdf
- Antonio De Nicola, Hedi Karray, Mayank Kejriwal, and Nada Matta (2020). *Knowledge, semantics and AI for risk and crisis management.* Editorial. 174–177 pages.
- Mayank Kejriwal, Juan F. Sequeda, and Vanessa Lopez (2019). Knowledge graphs: Construction, management and querying. Editorial in Semantic Web Journal 10, 6, 961–962.

TUTORIALS AND DEMONSTRATIONS

Tutorials and seminars

- Robert Lai, Alefiya Hussain, Mayank Kejriwal et al. *AI Aided Design and Development for Space Systems.* Ground System Architectures Workshop (GSAW), 2025.
- Mayank Kejriwal. *Will ChatGPT Replace Human Skill?* Annenberg Micro-Seminar for Undergraduates at USC, 2024.
- Mayank Kejriwal. *Artificial General Intelligence: Are we Close(r)?* Annenberg Micro-Seminar for Undergraduates at USC, 2023.
- Mayank Kejriwal. *Knowledge Graphs: A Practical Introduction Across Disciplines.* IEEE Symposium Series on Computational Intelligence (SSCI), 2021.
- Antoine Bosselut, Filip Ilievsky, Mayank Kejriwal, Simon Razniewski. *Commonsense Knowledge Acquisition and Representation.* AAAI, 2021.
- Mayank Kejriwal. *Knowledge Graphs: A Practical Introduction across Disciplines.* IEEE Symposium Series on Computational Intelligence, 2021; IEEE/ACM ASONAM, 2020.
- Filip Ilievsky, Mayank Kejriwal, Pedro Szekely. *Commonsense Knowledge Graphs.* ISWC, 2020.
- Gregoire Burel, Mayank Kejriwal, Prashant Khare, Pedro Szekely. *Social Media Analysis for Situation Awareness during Crises.* ACM The Web Conference (formerly WWW), 2018.
- Mayank Kejriwal, Craig Knoblock, Pedro Szekely. *Knowledge Graph Construction from Web Corpora.* AAAI, 2018.
- Mayank Kejriwal, Craig Knoblock, Pedro Szekely. *Constructing Domain-Specific Knowledge Graphs.* ISWC, 2017.
- Mayank Kejriwal, Pedro Szekely. *Data Mining in Unusual Domains with Information-rich Knowledge Graph Construction, Inference and Search.* ACM KDD, 2017.

Demonstrations and system exhibits

- Navapat Nananukul, Khanin Sisaengsuwancha and Mayank Kejriwal. *DeepGraph: Multi-Cluster Interactive Visualization of Complex Networks in a Learned Representation Space*. IEEE/ACM ASONAM, 2024.
- Yidan Sun, Mayank Kejriwal. *DeepGraph: Multi-Cluster Interactive Visualization of Complex Networks in a Learned Representation Space.* IEEE/ACM ASONAM, 2023.
- Mayank Kejriwal, Ke Shen. *Unsupervised Real-Time Induction and Interactive Visualization of Taxonomies over Domain-Specific Concepts.* IEEE/ACM ASONAM, 2021.
- Mayank Kejriwal, Shilpa Thomas. *Generating Novelty in Open-World Multi-Agent Environments.* NeurIPS, 2020.
- Mayank Kejriwal, Peilin Zhou. *SAVIZ: Interactive Exploration and Visualization of Social Media over Crisis Data.* IEEE/ACM ASONAM, 2019.
- Mayank Kejriwal, Runqi Shao, Pedro Szekely. *Expert-Guided Entity Extraction using Expressive Rules.* ACM SIGIR Conference, 2019.
- Mayank Kejriwal, Daniel Gilley, Pedro Szekely, Jill Crisman. *THOR: Text-enabled Humanitarian Operations in Real-time.* ACM The Web Conference (formerly WWW), 2018.
- Mayank Kejriwal, Pedro Szekely. *Constructing Domain-Specific Search Engines with No Programming.* AAAI, 2018. **Nominated for Best Demo.**

EDITORIAL AND CONFERENCE LEADERSHIP

- **Steering Committee Member,** ACM Knowledge Capture Conference, 2024-2027
- **Membership Review Committee,** Sigma Xi (Mathematics, Health Sciences and Engineering disciplines), 2025-current
- **Committee Member,** USC Student Recognition Awards, 2025
- **Handling Editor,** Journal article in Frontiers in Rehabilitation Sciences, 2023
- **Session Chair,** Machine Learning & Networks, Complex Networks and Applications Conference, Menton Riviera, France, 2023
- **Section Editor,** Technology for Online Social Networking and Human Computer Interaction, 3rd edition of the Encyclopedia on Social Network Analysis and Mining, Springer, 2023-2024
- **PhD Symposium Co-Chair,** The Web Conference, 2023
- **Co-Chair,** AAAI Spring Symposium on Designing Artificial Intelligence for Open Worlds, 2022
- **Demonstration Co-Chair,** The ACM International Conference on Information and Knowledge Management (CIKM), 2022
- **Workshop Co-Chair,** The IEEE/ACM International Conference on Advances in Social Network Analysis and Mining, 2022
- **Guest / Associate Editor**, Semantic Web Journal, Frontiers in Big Data, Journal of Web Semantics, Frontiers Special Issue on Data Mining and Management, Social Network Analysis and Mining Journal
- **Session Chair,** Association for the Advancement of Artificial Intelligence Annual Conference (AAAI), 2017
- **Workshop and Tutorials Co-Chair**, International Semantic Web Conference (ISWC), 2021
- **Senior Program Committee**, International Joint Conference on Artificial Intelligence (IJCAI), 2020
- **Co-Chair**, Workshop on Knowledge Graphs and E-Commerce held at the 26th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2020
- **Session Chair**, The ACM International Conference on Information and Knowledge Management, 2020
- **General Co-Chair**, The 10th International Conference on Knowledge Capture (ACM K-CAP), 2019
- **Co-Organizer**, AI for Social Good (Humanitarian Relief and Development Track) at AAAI Fall Symposium, 2019

MENTORSHIP AND ADVISING

Early-career research engineers and faculty:

- Akhilesh Jaiswal (Organization Mentor, ISI Mentoring Program, 2023)
- Min-Hsueh Chiu (Research Engineer @ AICS)

PhD students/PhD committee member:

- Navapat Nananukul (Incoming PhD Student, Fall 2025)
- Yidan Sun (Current PhD Student; Expected Graduation: Dec. 2024)
- Zhisheng Tang (Current PhD Student; Expected Graduation: May 2026)
- Ke Shen (Current PhD Student; Expected Graduation: May 2026)
- Han Kyul Kim (PhD Thesis Proposal Committee Member)
- Yufeng Yin (PhD Thesis Proposal Committee Member)
- Casandra Rusti (PhD Thesis Proposal Committee Member)
- Chathura Nagoda Gamage (PhD Thesis External Examiner, Australian National University)

MS students & directed research:

- Daiqi He (analysis of vulnerable groups in CFPB data)
- Vishal Patil (computational analysis of Yelp reviews, NSF data analysis)
- Shree Vaishnavi Bacha (computational analysis of Yelp reviews, OpenReviews data analysis)
- Revanth Yamani (computational analysis of Yelp reviews)
- Yining Ma (Independent Directed Research)
- Navapat Nananukul (Hallucinations in Large Language Models Project)
- Khanin Sisaengsuwanchai (Network Science & Visualization Project)
- Tito Alexandre Trindade Grine (M.Sc. Dissertation Committee, Invited External Examiner)
- Zhijie Lin (Independent Directed Research; HKG Project)
- Yongyi Ji (Independent Directed Research)
- Sara Melotte (Zumberge D&I)
- Akarsh Nagaraj (GNOME Project)
- Yuesheng Luo (Social Media Analytics Project)
- Kyle Wang (Social Media Analytics Project)
- Hongyu Li (GNOME; Social Media Analytics Project)
- Lu Wang (Social Media Analytics Project)
- Shilpa Thomas (GNOME Project)

Undergraduate students:

- Herry Wang (USC, 2024)
- Erica Okeh (Howard College, 2024)
- Cole Gawin (USC, 2024-205; funded partially under the 2025 Bridge Undergraduate Science (BUGS) Summer Research Program)
- Bruce Deng (high school summer intern, 2024)
- Sanya Khatter (USC Viterbi Klein Institute for Undergraduate Engineering life (KIUEL) program, Spring 2024)
- Adin Aberbach (Amazon SURE; Swarthmore College, 2023)
- Haejoon (John) Lim (NSF REU; Northwestern University, 2023)
- Anik Mandal (Viterbi IUSSTF; Indian Institute of Technology, Kharagpur, 2023)
- David Cody Lingan (NSF REU; Michigan State University, 2022)

- Junyu Ren (Viterbi Undergrad Tsinghua Program; Tsinghua University, 2022)
- Stephanie Kim (Amazon SURE; University of Chicago, 2022)
- Maia Nkonabang (Amazon SURE; USC, 2022)
- Daisy Zhou (URAP)
- Gwen Fang (URAP)

INVITED REVIEWER AND PROGRAM COMMITTEE MEMBER (2022- ONLY)

Reviewer

- Nature
- Nature Human Behavior
- Nature Machine Intelligence
- Nature Scientific Reports
- JMIRx Med
- Journal of Mixed Methods Research,
- IEEE Transactions on Pattern Recognition and Machine Intelligence
- IEEE Access
- Journal of Natural Language Engineering (Cambridge University Press)
- Elsevier Information Sciences
- ACM Computing Surveys
- PLOS Digital Health
- PNAS Nexus
- Journal of Open Innovation: Technology, Market, and Complexity
- Computers in Biology and Medicine
- ACM Transactions on Knowledge Discovery from Data
- Heliyon (Cell Press)
- Frontiers Artificial Intelligence - Medicine and Public Health
- Digital Discovery (Royal Society of Chemistry)
- Computers in Biology and Medicine
- Artificial Intelligence Journal
- IEEE Transactions on Big Data
- International Journal for Digital Earth (Taylor & Francis)
- IEEE Journal of Biomedical and Health Informatics
- Connection Science
- Frontiers in Sociology -- Urban Ecology
- Heritage Science (Springer)
- Applied Network Science (Springer)
- Knowledge and Information Systems Journal, Springer
- Frontiers Communication - Health Communication
- Discover Artificial Intelligence
- Engineering Applications of Artificial Intelligence
- PLOS Digital Health
- PLOS ONE
- Journal of Computational Social Science
- Frontiers in Public Health, Infectious Diseases - Surveillance, Prevention and Treatment
- ACM Transactions on Internet Technology (TOIT)
- Computers in Biology and Medicine
- SoftwareX
- IEEE Transactions on Knowledge Discovery from Data
- Cybernetics and Systems (Taylor & Francis)

Program Committee Member

- SIGIR: ACM Special Interest Group on Information Retrieval
- WWW: The ACM Web Conference (Industry Track)
- AAAI: Association for the Advancement of Artificial Intelligence Conference
- CNA: Complex Networks & Applications Conference
- IEEE Big Data Conference
- CIKM: Conference on Information and Knowledge Management (research, short tracks)
- ISWC: International Semantic Web Conference (research, in-use tracks)
- VOILA workshop on Visualization and Interaction for Ontologies and Linked Data @ ISWC
- KGLLM: First Workshop on Knowledge Graphs and Large Language Models @ ACL
- ESWC: Extended Semantic Web Conference (research, resource, posters & demo tracks)
- IAAI: Innovative Applications of Artificial Intelligence Conference (co-held with AAAI)
- ICSC: IEEE International Conference on Semantic Computing
- CRR: Workshop on Commonsense Representation and Reasoning @ ACL
- TAAI: International Conference on Technologies and Applications of Artificial Intelligence
- KGSWC: Knowledge Graph and Semantic Web Conference
- CogSci: Cognitive Science Conference
- AICT: IEEE International Conference on Application of Information and Communication Technologies
- IEEE Global Humanitarian Technology Conference

SELECTED OTHER SERVICE AND OUTREACH

- **Invited Webinar Panelist,** The Conversation on Artificial Intelligence: How to use AI safely and what to watch out for, April 2025
- **Invited Reviewer,** French National Research Agency (ANR), 2025
- **Member,** USC Academic Senate, 2024-2025
- **Mentor,** ISI Mentoring Program, 2025-current
- **Instructor,** USC/ISI Stimulating STEM, DEI program for high school students, July 2023-2024
- **DOE/ASCR Advancements in AI Science Reviewer** (2024)
- **Representative,** Industrial & Systems Engineering in Viterbi Engineering Faculty Council (2022-2024)
- **NSF Reviewer/Panelist** (2023-2024)
- **Invited Panelist**, "A Strategic Approach to Faculty Racial Equity-Minded Action" hosted by USC Vice Dean Brandi Jones (2021)
- **Invited Commentator Panelist,** US State Department's Global Engagement Center Virtual Tech Demo Presentation (2021)
- **Invited Participant,** XPrize Joint Action Meeting on Advancing Economic Equity for Black Americans (2021)
- **Moderator,** Panel on "Ensuring Responsible AI" on the *Ethics & Social Responsibility Stage* at RE*WORK's Deep Learning 2.0 Virtual Summit (2021)
- **Invited Presentation**, "Fostering Familial Scientific Appreciation through Graduate Student-Led Activities in Children's Museums" in *Communicating the Future: Engaging the Public in Basic Science* organized by the The Kavli Foundation & Office of Science, US Department of Energy (2021)
- **Invited Speaker and Panelist,** USC AI Futures Symposium on AI with Common Sense (2021)
- **Invited Panelist,** Future of Disability Summit, held virtually (2021)
- **Ambassador & Subject Matter Expert,** Ethics4NextGenAI national hackathon, held virtually (2020)
- **Invited Speaker**, "Fighting Human Trafficking with Technology" at the National University of Juridical Sciences, India (2019)
- **Red Judge,** IBM Watson AI XPrize, Geneva (2019)

- **Invited Participant**, Roundtable on "Using Artificial Intelligence for Combating Online Sexual Abuse of Children" at the *Concordia Summit*, co-held with the UN General Assembly, New York City (2019)

SELECTED PRESS

Popular Science | The Science Archive | The Colin McEnroe Show (Connecticut Public Radio) | World Economic Forum | Daily Mail | The Guardian | The Conversation | Big Think | Data Skeptic (Podcast) | Global News Canada | San Francisco Times | Fast Company | CNN Indonesia | INFORMS Resoundingly Human (Podcast) | Press Trust of India | National Herald | Education Times | Learning More (Podcast) | MLOps (Podcast) | USC Viterbi News

PROFESSIONAL SOCIETY MEMBERSHIPS

American Association for the Advancement of Science (AAAS) | Association for Computing Machinery (ACM) | Association for the Advancement of Artificial Intelligence (AAAI) | National Center for Faculty Development & Diversity (NCFDD) | Academy of Management (AOM) | Institute of Electrical and Electronics Engineers (IEEE) | Institute for Operations Research and the Management Sciences (INFORMS) | Society for Industrial and Applied Mathematics (SIAM) | American Society for Engineering Education (ASEE) | Cognitive Science Society