

Hamid Karimi, Ph.D.

Data Science and Application (DSA) Lab
School of Computing
Utah State University, Logan, Utah 84322

✉ hamid.karimi@usu.edu

🌐 <http://dsa.cs.usu.edu>

🐙 github.com/hamidkarimi/

🐙 github.com/DSAatUSU (DSA's GitHub)

🎓 [Google Scholar](#)

🌐 [linkedin.com/in/hamidkariminetwork/](https://www.linkedin.com/in/hamidkariminetwork/)

Employment History

Aug 2021 – Present **Assistant Professor, School of Computing[†]**, Utah State University
([†]previously "Department of Computer Science")
Affiliated with [Data Science & Artificial Intelligence Center @ USU](#)

Education

Aug 2015 – Jun 2021 **Ph.D., Computer Science**, Michigan State University
Advisor: [Dr. Jiliang Tang](#)
Dissertation title: *Teachers in Social Media: A Data Science Perspective*
Research areas: *Educational Data Mining, Social Media Analytics, Machine Learning*

Jan 2010 – Sep 2012 **M.Sc., Information Technology**, Urmia University (Iran)

Sep 2005 – Oct 2009 **B.Sc., Computer Engineering**, University of Isfahan (Iran)

Funded Projects

Oct 2023 – Sep 2026 [Learning Analytics for Process-driven Computer Programming Assignments](#)
Funding Agency: National Science Foundation (NSF)
Role: sole PI
Amount: **\$349,847**

Jul 2023 – Jun 2026 [BPE Track 2: Disability DCL - Capturing Narratives that Characterize Neurodivergent Strengths and Weaknesses](#)
Funding Agency: National Science Foundation (NSF)
Role: Co-PI
Amount: **\$373,508** (my share: 40%)

Nov 2021 – Oct 2024 [A Smart Toolkit for Knowledge Brokers to Visualize Social Opportunity Spaces](#)
Funding Agency: The Bill and Melinda Gates Foundation
Role: Technical Partner
Amount: **\$74,000** (Total: \$2M)

Prior Research Experience

Jun 2017 – Jul 2021 [Data Science and Engineering Lab](#), Michigan State University
PhD Student, Graduate Research Assistant (RA)
Projects: *Educational data mining, Compromised accounts and misinformation detection, and societal and political analytics*
Supervisor: [Dr. Jiliang Tang](#)

Prior Research Experience (continued)

- Apr 2019 – Jul 2021 Teachers in Social Media, Michigan State University
PhD Student, Graduate Research Assistant (RA)
Project: *Understanding teachers' online footprints using social media analytics*
Supervisors: [Dr. Ken Frank](#) and [Dr. Kaitlin Torphy](#)
- May 2019 – Sep 2019 [Dataminr Inc](#), New York City
Research Intern, Data Science Research Group
Project: *Event detection in social media during crisis*
Supervisor: [Dr. Alex Jaimes](#)
- Feb 2010 – Sep 2012 [Dr. Yousefi's Lab](#), Urmia University
Master's Student, Graduate Research Assistant (RA)
Project: *File broadcast scheduling algorithms for vehicular networks*
Supervisor: [Dr. Saleh Yousefi](#)



Honors & Awards

- Nov 2022 International **Faculty Recognition** Award at Utah State University
- Dec 2020 MSU Dissertation Completion **Fellowships**
- Feb 2020 MSU COGS Conference Award for WSDM'20 (with **Fellowship** Funding)
- Aug 2019 – May 2020 MSU Graduate **Leadership Fellow**
- Aug 2018 – May 2019 MSU Engineering Graduate **Leadership Fellow**
- Apr 2019 **Best Poster Award** at MSU Engineering Symposium
Title: Learning Hierarchical Discourse-level Structure for Fake News Detection
- Feb 2019 **Outstanding Graduate Student Service Award** at CSE@MSU
- Aug 2018 **Best Paper Award** at IEEE/ACM ASONAM 2018
Title: End-to-end compromised account detection
- Feb 2018 **Best Oral Presentation**, The 10th Graduate Academic Conference (COGS)@MSU
Title: Veracity in Big Data (Video)
- Aug 2018 **Travel Award** for International Conference on Multimodal Interaction (ICMI 2018) from NSF
- Aug 2012 Top-ranked master's student in Information Technology, Urmia University

Publications

Remark: Underlined names denote mentored students/scholars, and an asterisk (*) indicates equal contribution.

Journal Articles











- 1 Zixi Chen, Kaitlin T. Torphy Knake, Hamid Karimi, and Nicole Donzella, "Building a nationally representative sample of teachers' online and offline: the Public Instructional Network of School Resources," *Journal of Research on Technology in Education*, vol. 57, no. 3, pp. 521–546, 2025.  DOI: [10.1080/15391523.2023.2266060](https://doi.org/10.1080/15391523.2023.2266060). eprint: <https://doi.org/10.1080/15391523.2023.2266060>.
- 2 Ehsan Kahrizi, Chonoor Abdi Chooplou, Hamid Karimi, Parisa Tayebi, Seyed Ali Akbar Salehi Neyshabouri, and Masoud Ghodsian, "Machine Learning-Driven Optimization of Air Bubble Curtain Locations for Controlling Sea Water Intrusion," *Results in Engineering*, p. 108 436, 2025, ISSN: 2590-1230.  DOI: <https://doi.org/10.1016/j.rineng.2025.108436>.

- 3 Kaitlin Torphy Knake, Hamid Karimi, Sihua Hu, Kenneth A. Frank, and Jiliang Tang, "Educational Research in the Twenty-First Century: Leveraging Big Data to Explore Teachers' Professional Behavior and Educational Resources Accessed within Pinterest," *The Elementary School Journal*, vol. 122, no. 1, pp. 86–111, 2021. [DOI: 10.1086/715482](https://doi.org/10.1086/715482).
- 4 Hamid Karimi, Tyler Derr, Kaitlin T. Torphy, Kenneth A. Frank, and Jiliang Tang, "A Roadmap for Incorporating Online Social Media in Educational Research," *Teachers College Record*, vol. 121, no. 14, pp. 1–24, 2019. [DOI: 10.1177/016146811912101412](https://doi.org/10.1177/016146811912101412).

Conference Proceedings

- 1 Soheila Farokhi, Xiaojun Qi, and Hamid Karimi, "TAWRMAC: A Novel Dynamic Graph Representation Learning Method," arXiv:2510.09884 (Accepted to The WebConf 2026), 2026. arXiv: [2510.09884](https://arxiv.org/abs/2510.09884) [cs.LG].
- 2 Leslie A Brown, Catherine McGough Spence, Autumn Cuellar, Kartik Thakkar, Hamid Karimi, and Marissa A Tsugawa, "WIP: Developing an Interview Protocol to Unveil the Stories of Neurodivergent Engineering Students," in *2025 ASEE Annual Conference & Exposition*, Montreal, Quebec, Canada: ASEE Conferences, Jun. 2025. [DOI: 10.18260/1-2--57393](https://doi.org/10.18260/1-2--57393).
- 3 Xueqi Cheng, Catherine Yang, Yuying Zhao, Yu Wang, Hamid Karimi, and Tyler Derr, "BTS: A Comprehensive Benchmark for Tie Strength Prediction," in *Proceedings of the 31st ACM SIGKDD Conference on Knowledge Discovery and Data Mining V.2*, ser. KDD '25, Toronto ON, Canada: Association for Computing Machinery, 2025, pp. 5345–5354, ISBN: 9798400714542. [DOI: 10.1145/3711896.3737441](https://doi.org/10.1145/3711896.3737441).
- 4 Muhammad Fawad Akbar Khan*, Ludia Eka Feri*, Ha Nguyen, and Hamid Karimi, "Student-Perceived Cognitive Load of LLM-Generated Programming Exercises," in *2025 IEEE 12th International Conference on Data Science and Advanced Analytics (DSAA)*, 2025, pp. 1–12. [DOI: 10.1109/DSAA65442.2025.11247983](https://doi.org/10.1109/DSAA65442.2025.11247983).
- 5 Soheila Farokhi, Arash Azizian Foumani, Xiaojun Qi, Tyler Derr, and Hamid Karimi, "EDGE-UP: Enhanced Dynamic GNN Ensemble for Unfollow Prediction in Online Social Networks," in *Social Networks Analysis and Mining*, Cham: Springer Nature Switzerland, 2025, pp. 20–39, ISBN: 978-3-031-78541-2. [DOI: https://doi.org/10.1007/978-3-031-78541-2_2](https://doi.org/10.1007/978-3-031-78541-2_2).
- 6 Aswani Yaramala*, Soheila Farokhi*, and Hamid Karimi, "Navigating the Data-Rich Landscape of Online Learning: Insights and Predictions from ASSISTments," in *Proceedings of the 17th International Conference on Educational Data Mining*, Atlanta, Georgia, USA: International Educational Data Mining Society, Jul. 2024, pp. 321–331, ISBN: 978-1-7336736-5-5. [DOI: 10.5281/zenodo.12729826](https://doi.org/10.5281/zenodo.12729826).
- 7 Kiana Kheiri and Hamid Karimi, "SentimentGPT: Leveraging GPT for Advancing Sentiment Analysis," in *2024 IEEE International Conference on Big Data (BigData)*, 2024, pp. 7051–7060. [DOI: 10.1109/BigData62323.2024.10825350](https://doi.org/10.1109/BigData62323.2024.10825350).
- 8 Muhammad Fawad Akbar Khan, Max Ramsdell, Ha Nguyen, and Hamid Karimi, "Human Evaluation of GPT for Scalable Python Programming Exercise Generation," in *2024 IEEE 11th International Conference on Data Science and Advanced Analytics (DSAA)*, 2024, pp. 1–10. [DOI: 10.1109/DSAA61799.2024.10722841](https://doi.org/10.1109/DSAA61799.2024.10722841).
- 9 Muhammad Fawad Akbar Khan*, Max Ramsdell*, Erik Falor, and Hamid Karimi, "Assessing the Promise and Pitfalls of ChatGPT for Automated CS1-driven Code Generation," in *Proceedings of the 17th International Conference on Educational Data Mining*, Atlanta, Georgia, USA: International Educational Data Mining Society, Jul. 2024, pp. 83–95, ISBN: 978-1-7336736-5-5. [DOI: 10.5281/zenodo.12729778](https://doi.org/10.5281/zenodo.12729778).
- 10 Soheila Farokhi*, Haozhe Chen*, Kevin Moon, and Hamid Karimi, "Advancing Tabular Data Classification with Graph Neural Networks: A Random Forest Proximity Method," in *2024 IEEE International Conference on Big Data (BigData)*, 2024, pp. 7011–7020. [DOI: 10.1109/BigData62323.2024.10825972](https://doi.org/10.1109/BigData62323.2024.10825972).

- 11 Hamid Karimi, Kaitlin Torphy Knake, and Kenneth A. Frank, "An Analysis of Diffusion of Teacher-curated Resources on Pinterest," in *Proceedings of the 16th International Conference on Educational Data Mining*, Mingyu Feng, Tanja Käser, and Partha Talukdar, Eds., Bengaluru, India: International Educational Data Mining Society, Jul. 2023, pp. 55–66, ISBN: 978-1-7336736-4-8. [DOI: 10.5281/zenodo.8115713](https://doi.org/10.5281/zenodo.8115713).
- 12 Kiana Kheiri, Muhammad Fawad Akbar Khan, Tyler Derr, and Hamid Karimi, "An Analysis of the Dynamics of Ties on Twitter," in *2023 IEEE International Conference on Big Data (BigData)*, 2023, pp. 5809–5817. [DOI: 10.1109/BigData59044.2023.10386839](https://doi.org/10.1109/BigData59044.2023.10386839).
- 13 Muhammad Fawad Akbar Khan, John Edwards, Paul Bodily, and Hamid Karimi, "Deciphering student coding behavior: Interpretable keystroke features and ensemble strategies for grade prediction," in *2023 IEEE International Conference on Big Data (BigData)*, IEEE, 2023, pp. 5799–5808. [DOI: 10.1109/BigData59044.2023.10386085](https://doi.org/10.1109/BigData59044.2023.10386085).
- 14 Soheila Farokhi, Aswani Yaramal, Jiangtao Huang, Muhammad Fawad Akbar Khan, Xiaojun Qi, and Hamid Karimi, "Enhancing the Performance of Automated Grade Prediction in MOOC using Graph Representation Learning," in *2023 IEEE 10th International Conference on Data Science and Advanced Analytics (DSAA)*, 2023, pp. 1–10. [DOI: 10.1109/DSAA60987.2023.10302642](https://doi.org/10.1109/DSAA60987.2023.10302642).
- 15 Sakshi Solanki, Kiana Kheiri, Marissa A Tsugawa, and Hamid Karimi, "Leveraging Social Media Analytics in Engineering Education Research," in *2023 ASEE Annual Conference Exposition*, <https://peer.asee.org/43472>, Baltimore, Maryland: ASEE Conferences, Jun. 2023. eprint: <https://peer.asee.org/leveraging-social-media-analytics-in-engineering-education-research.pdf>.
- 16 Hamid Karimi and Tyler Derr, "Decision Boundaries of Deep Neural Networks," in *2022 21st IEEE International Conference on Machine Learning and Applications (ICMLA)*, 2022, pp. 1085–1092. [DOI: 10.1109/ICMLA55696.2022.00179](https://doi.org/10.1109/ICMLA55696.2022.00179).
- 17 Hamid Karimi, Kaitlin Torphy Knake, and Kenneth A. Frank, "Teachers in Social Media: A Gender-aware Behavior Analysis," in *2022 IEEE International Conference on Big Data (Big Data)*, 2022, pp. 1842–1849. [DOI: 10.1109/BigData55660.2022.10020354](https://doi.org/10.1109/BigData55660.2022.10020354).
- 18 Hamid Karimi, Muhammad Fawad Akbar Khan, Haochen Liu, Tyler Derr, and Hui Liu, "Enhancing Individual Fairness through Propensity Score Matching," in *2022 IEEE 9th International Conference on Data Science and Advanced Analytics (DSAA)*, 2022, pp. 1–10. [DOI: 10.1109/DSAA54385.2022.10032333](https://doi.org/10.1109/DSAA54385.2022.10032333).
- 19 Delaney Moore, John Edwards, Hamid Karimi, Rajiv Khadka, and Paul Bodily, "Temporal Abstract Syntax Trees for Understanding Student Coding Thought Process," in *2022 Intermountain Engineering, Technology and Computing (IETC)*, 2022, pp. 1–6. [DOI: 10.1109/IETC54973.2022.9796943](https://doi.org/10.1109/IETC54973.2022.9796943).
- 20 Muhammad Fawad Akbar Khan and Hamid Karimi, "A New Framework to Assess the Individual Fairness of Probabilistic Classifiers," in *2022 21st IEEE International Conference on Machine Learning and Applications (ICMLA)*, 2022, pp. 876–881. [DOI: 10.1109/ICMLA55696.2022.00145](https://doi.org/10.1109/ICMLA55696.2022.00145).
- 21 Aaron Brookhouse*, Tyler Derr*, Hamid Karimi*, H. Russell Bernard, and Jiliang Tang, "Road to the White House: Analyzing the Relations Between Mainstream and Social Media During the U.S. Presidential Primaries," in *Proceedings of the 32nd ACM Conference on Hypertext and Social Media*, ser. HT '21, Virtual Event, USA: Association for Computing Machinery, 2021, pp. 57–66, ISBN: 9781450385510. [DOI: 10.1145/3465336.3475115](https://doi.org/10.1145/3465336.3475115).
- 22 Tyler Derr, Hamid Karimi, Xiaorui Liu, Jiejun Xu, and Jiliang Tang, "Deep Adversarial Network Alignment," in *Proceedings of the 30th ACM International Conference on Information & Knowledge Management*, ser. CIKM '21, Virtual Event, Queensland, Australia: Association for Computing Machinery, 2021, pp. 352–361, ISBN: 9781450384469. [DOI: 10.1145/3459637.3482418](https://doi.org/10.1145/3459637.3482418).
- 23 Hamid Karimi, Jiliang Tang, Xochitl Weiss, and Jiangtao Huang, "Automatic Identification of Teachers in Social Media using Positive Unlabeled Learning," in *2021 IEEE International Conference on Big Data (Big Data)*, 2021, pp. 643–652. [DOI: 10.1109/BigData52589.2021.9671476](https://doi.org/10.1109/BigData52589.2021.9671476).

- 24 Haochen Liu, Wei Jin, Hamid Karimi, Zitao Liu, and Jiliang Tang, "The Authors Matter: Understanding and Mitigating Implicit Bias in Deep Text Classification," in *Findings of the Association for Computational Linguistics: ACL-IJCNLP 2021*, Chengqing Zong, Fei Xia, Wenjie Li, and Roberto Navigli, Eds., Online: Association for Computational Linguistics, Aug. 2021, pp. 74–85.  DOI: [10.18653/v1/2021.findings-acl.7](https://doi.org/10.18653/v1/2021.findings-acl.7).
- 25 Hamid Karimi, Tyler Derr, Kaitlin T. Torphy, Kenneth A. Frank, and Jiliang Tang, "Towards Improving Sample Representativeness of Teachers on Online Social Media: A Case Study on Pinterest," in *Artificial Intelligence in Education*, Cham: Springer International Publishing, 2020, pp. 130–134, ISBN: 978-3-030-52240-7.  DOI: https://doi.org/10.1007/978-3-030-52240-7_24.
- 26 Hamid Karimi and Jiliang Tang, "Decision Boundary of Deep Neural Networks: Challenges and Opportunities," in *Proceedings of the 13th International Conference on Web Search and Data Mining*, ser. WSDM '20, Houston, TX, USA: Association for Computing Machinery, 2020, pp. 919–920, ISBN: 9781450368223.  DOI: [10.1145/3336191.3372186](https://doi.org/10.1145/3336191.3372186).
- 27 Hamid Karimi, Kaitlin T. Torphy, Tyler Derr, Kenneth A. Frank, and Jiliang Tang, "Characterizing Teacher Connections in Online Social Media: A Case Study on Pinterest," in *Proceedings of the Seventh ACM Conference on Learning at Scale*, ser. L@S '20, Virtual Event, USA: Association for Computing Machinery, 2020, pp. 249–252, ISBN: 9781450379519.  DOI: [10.1145/3386527.3405941](https://doi.org/10.1145/3386527.3405941).
- 28 Hamid Karimi, Kaitlin T. Torphy, Tyler Derr, Kenneth A. Frank, and Jiliang Tang, "Understanding and Promoting Teacher Connections in Online Social Media: A Case Study on Pinterest," in *2020 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE)*, 2020, pp. 536–541.  DOI: [10.1109/TALE48869.2020.9368377](https://doi.org/10.1109/TALE48869.2020.9368377).
- 29 Hamid Karimi*, Tyler Derr*, Jiangtao Huang, and Jiliang Tang, "Online academic course performance prediction using relational graph convolutional neural network.," ERIC, 2020, pp. 444–450. eprint: https://educationaldatamining.org/files/conferences/EDM2020/papers/paper_45.pdf.
- 30 Hamid Karimi*, Jiangtao Huang*, and Tyler Derr, "A deep model for predicting online course performance," Association for the Advancement of Artificial Intelligence, 2020, pp. 1–6. eprint: https://tylersnetwork.github.io/papers/aaai-ai4edu2020-predicting_online_course_performance.pdf.
- 31 Hamid Karimi and Jiliang Tang, "Learning Hierarchical Discourse-level Structure for Fake News Detection," in *Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 1 (Long and Short Papers)*, Minneapolis, Minnesota: Association for Computational Linguistics, Jun. 2019, pp. 3432–3442.  DOI: [10.18653/v1/N19-1347](https://doi.org/10.18653/v1/N19-1347).
- 32 Hamid Karimi*, Tyler Derr*, Aaron Brookhouse, and Jiliang Tang, "Multi-factor congressional vote prediction," in *Proceedings of the 2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining*, ser. ASONAM '19, Vancouver, British Columbia, Canada: Association for Computing Machinery, 2019, pp. 266–273, ISBN: 9781450368681.  DOI: [10.1145/3341161.3342884](https://doi.org/10.1145/3341161.3342884).
- 33 Hamid Karimi, "Interpretable Multimodal Deception Detection in Videos," in *Proceedings of the 20th ACM International Conference on Multimodal Interaction*, ser. ICMI '18, Boulder, CO, USA: Association for Computing Machinery, 2018, pp. 511–515, ISBN: 9781450356923.  DOI: [10.1145/3242969.3264967](https://doi.org/10.1145/3242969.3264967).
- 34 Hamid Karimi, Proteek Roy, Sari Saba-Sadiya, and Jiliang Tang, "Multi-Source Multi-Class Fake News Detection," in *Proceedings of the 27th International Conference on Computational Linguistics*, Emily M. Bender, Leon Derczynski, and Pierre Isabelle, Eds., Santa Fe, New Mexico, USA: Association for Computational Linguistics, Aug. 2018, pp. 1546–1557.  URL: <https://aclanthology.org/C18-1131/>.
- 35 Hamid Karimi, Jiliang Tang, and Yanen Li, "Toward End-to-End Deception Detection in Videos," in *2018 IEEE International Conference on Big Data (Big Data)*, 2018, pp. 1278–1283.  DOI: [10.1109/BigData.2018.8621909](https://doi.org/10.1109/BigData.2018.8621909).

- 36 Hamid Karimi, Courtland VanDam, Liyang Ye, and Jiliang Tang, “End-to-end compromised account detection,” in *Proceedings of the 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining*, ser. ASONAM ’18, Barcelona, Spain: IEEE Press, 2018, pp. 314–321, ISBN: 9781538660515. [DOI: 10.1109/ASONAM.2018.8508296](https://doi.org/10.1109/ASONAM.2018.8508296).
- 37 Courtland VanDam, Pang-Ning Tan, Jiliang Tang, and Hamid Karimi, “CADET: a multi-view learning framework for compromised account detection on Twitter,” in *Proceedings of the 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining*, ser. ASONAM ’18, Barcelona, Spain: IEEE Press, 2018, pp. 471–478, ISBN: 9781538660515. [DOI: 10.1109/ASONAM.2018.8508654](https://doi.org/10.1109/ASONAM.2018.8508654).

Preprints

- 1 [Haozhe Chen*](#), [Farokhi, Soheila*](#), Kelvyn Bladen, Hamid Karimi, and Kevin R Moon, *Random-Forest-Induced Graph Neural Networks for Tabular Learning*, 2026. arXiv: [2602.24224](https://arxiv.org/abs/2602.24224) [cs.GR]. [URL: https://arxiv.org/abs/2602.24224](https://arxiv.org/abs/2602.24224).

Teaching (as Instructor)

Aug 2021 – Present	<p>CS5840/CS6840: Social Network Analysis¹</p> <p>Description: This course introduces the background, techniques, and concepts in social network analysis with an emphasis on graph theory, online social networks, and network analysis techniques.</p> <p>Topics: Introduction, Graph Essentials, Network Measures, Network Models, Community Analysis, Information Diffusion, Influence and Homophily, (Depending on time) Advanced Topics such as Evolving Social Network.</p>
	<p>CS5850/CS6850: Introduction to Data Analysis</p> <p>Description: This course is intended for senior undergraduate and graduate students interested in gaining hands-on experience applying computational techniques to solve big data analysis problems. The course topics are <i>intentionally broad</i> and include various data analysis skills. This way, students will become familiar with the necessary tools and understand how to perform all steps of a data analysis project.</p> <p>Topics: Introduction, Data Representation, Data Collection, Data Storage, Data Quality, Data Preprocessing, Association Rule Mining, Supervised Learning, and Clustering.</p>
Sep 2023 – Present	<p>CS5050: Advanced Algorithms</p> <p>Description: This course builds on core knowledge of algorithms and data structures to explore advanced techniques in algorithm design and analysis. This course is ideal for students seeking to strengthen algorithmic thinking, prepare for technical interviews, or pursue research and careers in optimization, AI, or systems development.</p> <p>Topics: Algorithm Analysis, Divide-and-conquer, Prune-and-search, Data Structure Design, Dynamic Programming, Graph Algorithms, and Computational Complexity.</p>

¹For administrative reasons, this course was renamed to Graph Mining in Spring 2025.

Teaching (as Student)

- Sep 2019 – Dec 2020 Co-Instructor, Department of Computer Science and Engineering, Michigan State University
Courses: Big Data Analysis (Fall 2019 & Fall 2020)
- Aug 2015 – Aug 2018 Teaching Assistant, Department of Computer Science and Engineering, Michigan State University
Courses:
Computer Networks (Fall 2015, Spring 2016 & Fall 2016)
Intro to Programming II (C++) (Summer 2016 & Spring 2017)
Operating Systems (Summer 2017 & Fall 2017)
- Aug 2011 – Aug 2012 Temporary Instructor, Urmia University, Department of Computer Engineering
Courses:
Internet Technologies (Undergraduate, Fall 2011)
Introduction to C++ Programming (Undergraduate, Spring 2012)
Introduction to C++ Programming [lab] (Undergraduate, Spring 2012)

Mentoring (as advisor, Utah State University)

- Aug 2021 – Present Muhammad Fawad Akbar Khan, Ph.D student of Computer Science
Focus: AI in Education, Educational Data Mining
Publications: Five first author, three co-author, and one under review
Awards: Best Graduate Teaching Assistant 2023-2024 for teaching assistant of Social Network Analysis and Introduction to Data Analysis
- Aug 2022 – Present Soheila Farokhi, Ph.D student of Computer Science
Focus: Machine Learning with Graphs
Publications: Four first author and one under review
Awards: SoBigData Award (2023), IEEE Computational Intelligence Society (CIS) travel grant (2023), CoS Charles Sorenson GR Scholarship (2024), College of Science Graduate Seely-Hinckley Scholarship (2024), and USUSA Graduate Enhancement Award (GEA)-Utah State University (2025).
- Aug 2024 – Present Ramtin Davoudi, Ph.D student of Computer Science
Focus: LLMs in Social Media Analytics
Publications: One under review
Awards: [Presidential Doctoral Research Fellowship \(PDRF\)](#)
- Jun 2024 – Present Ludia Eka Feri, Ph.D student of Computer Science
Focus: Educational Data Mining
Publications: One co-first author and one under review
- Aug 2022 – May 2024 Aswani Yaramala, MS student of Computer Science
Focus: Computational Methods in MOOCs
Publications: One first author and one co-author
Current position: Data Analyst at Utah Valley University

Mentoring (as advisor, Utah State University) (continued)

- Aug 2023 – Aug 2025 Kartik Thakkar, MS student of Computer Science
Focus: Social Media Analytics of Online Neurodivergent Community
Publications: One under review
- Feb 2024 – Present Nathan Fritzler, Undergraduate student of Computer Science
Focus: AI-Driven Programming Technology
Publications: One under review
- Jun 2023 – Jun 2024 Max Ramsdell, Undergraduate student of Computer Science
Focus: LLMs for Programming Education
Publications: One co-first author and one co-author

Mentoring (as Ph.D, Michigan State University)

- Aug 2020 – May 2021 Xochitl Veronica Sanchez Weiss, B.S. Computer Science & Engineering @ MSU
Focus: Online teacher-curated educational content characterization
Publications: One co-author
- Aug 2018 – May 2021 Aaron Brookhouse, B.S. Electrical Engineering @ MSU
Focus: Online teacher-curated educational content characterization
Publications: One first author and one co-author
Awards: MSU Professorial Assistantship Program (top 1% of students nationally), and WSU's Smart Environments REU Program
- Aug 2017 – May 2018 Liyang Ye, B.S. Computer Science and Engineering @ MSU
Focus: Compromised account detection on online social media platforms
Publications: One co-author
Award: Co-authored "End-to-End Compromised Account Detection", receipt of the **Best Paper Award** of ASONAM'18

Invited Talks

- Feb 2023 [Interview](#) with [AggieTVNews](#), a local TV station at Utah State University about ChatGPT
- Oct 2023 Utah STEM Action Center, Department of Cultural and Community Engagement
- Nov 2022 Guest Lecture on "Machine Learning with Graphs"
Deep Learning Theory and Applications class (STAT/CS 6685)
- Sep 2021 Guest Lecture on "Big Data and Machine Learning"
Department of Plants, Soils & Climate, Utah State University
- Mar 2020 A roadmap for incorporating online social media in educational research
Teachers College at Columbia University, New York City ([Video](#))
- May 2019 Teachers in Social Media: Social Science Research in the Fifth Estate
University of Chicago, Chicago ([Video](#))
- Jun 2019 How do Teachers Utilize Social Media?
Sci-Files Radio Show ([Podcast](#))

Services

- Editor**
- The Guest Editor of Mathematics Journal, Special Issue: “Data Analysis for Social Networks and Information Systems” (2025)
 - The Guest Editor of open access journal Water on Special Issue “Novel Approaches and Metrics to Characterize and Predict Hydrometeorological Extremes: Machine Learning and Numerical Models” (2023)

Senior Program Committee Chair

- International Conference on Pattern Recognition (ICPR 2024)
- The Web Conference 2026

Program Committee

Since 2020, depending my availability, I regularly review papers from these conferences: Association for the Advancement of Artificial Intelligence (AAAI), International Conference on Information and Knowledge Management (CIKM), IEEE International Conference on Data Mining (ICDM), Advances in Social Networks Analysis & Mining (ASONAM), International Conference on Information and Knowledge Management (CIKM), ACM International Conference on Web Search and Data Mining (WSDM), SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), IEEE International Conference on Machine Learning and Applications (ICMLA), International Conference on Pattern Recognition (ICPR), Conference on Empirical Methods in Natural Language Processing (EMNLP), Annual Meeting of the Association for Computational Linguistics (ACL), The Web Conference (WWW), International Conference on Web and Social Media (ICWSM), AI in Education (AIED), International Conference on Learning Analytics & Knowledge (LAK), and Educational Data Mining (EDM).

Journal Reviewer

I have reviewed research articles from the following journals: Journal of Mathematics Teacher Education (JMTE), Data Mining and Knowledge Discovery, Information Processing and Management, IEEE Transactions on Knowledge and Data Engineering (TKDE), ACM Transactions on Knowledge Discovery from Data (TKDD), Computer & Education, IEEE Transactions on Neural Networks and Learning Systems, Teachers College Record, and Field Methods.

Sep 2021 – Present

Graduation Admission Committee at the School of Computing at USU

Legal Status

American Permanent Resident (a.k.a Green Card Holder)

References

Available on Request