Dakuo Wang

Curriculum Vitae

Associate Professor
Northeastern University
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Boston, MA 02115

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RESEARCH INTERESTS

Human-computer interaction, human-AI collaboration, computer-supported cooperative work

EDUCATION

Ph.D., Information and Computer Science, University of California Irvine, U.S.A.   2016
Dissertation: *Exploring and Supporting Today's Collaborative Writing*
Committee: Judith S. Olson (Chair), Gary M. Olson, Daniel Russell (Google)

Master of Science, Information and Computer Science**, University of California   2016
Irvine, U.S.A.

Master of Science, Electrical and Computer Engineering**, University of California   2012
Irvine, U.S.A.

Diplôme d'Ingénieur, Système d'Informatique**, Ecole Centrale d'Electronique   2010
Paris, FRANCE

Bachelor of Science, Computer Science, Beijing University of Technology,   2009
CHINA

EMPLOYMENT

Northeastern University, Director of AI Applications Graduate Program,   2024 — Present
Boston, MA, U.S.A**.

Northeastern University, Associate Professor, Boston, MA, U.S.A**.   2023 — Present

Stanford University, Visiting Scholar, Stanford, CA, U.S.A**.   2022 — 2024

Northeastern University, Adjunct Faculty, Boston, MA, U.S.A**.   2021 — 2022

MIT-IBM Watson AI Lab, Principal Investigator, Cambridge, MA, U.S.A.   2019 — 2022

IBM Research, Senior Research Team Lead, Cambridge, MA, U.S.A.   2018 — 2022

IBM T.J. Watson Research, Research Staff Member, Yorktown Heights, NY,   2016 — 2018
U.S.A.

IBM China Research Lab, Research Intern, BEIJING, CHINA   Summer 2013

University of California Irvine, Research Assistant, CA, U.S.A.   2012 — 2016

France Telecom, System Engineer Intern, PARIS, FRANCE   2009 — 2011

GRANTS

External Grant: Funded

"SCH: Improving Early Prediction and Decision-Making for Sepsis with Human-AI Collaboration", **NIH R01AI188576-01** (**Role**: **MPI**, PI: Prof. Ping Zhang from Ohio State University, Total: $1,200,000, Personal share: $600,000)   2024 -- 2028

"Surveillance of Modifiable Social Determinants of Health for Prioritizing Wraparound Supports", **HSR IIR 22-204** (**Role: Consultant**, PI: Prof. Hong Yu, Prof. David Smelson from University of Massachusetts Amherst, Total: $1,100,000, Personal share: $8,000)   2024 -- 2028

"Building A Teacher-AI Collaborative System for Personalized Instruction and Assessment of Comprehension Skills", **NSF 2302730** (**Role: CO-PI**, PI: Prof. Ying Xu from University of Michigan, Total: $850,000, Personal share: $180,000)   2023 -- 2026

"REmote symptom COllection to improVE postopeRative care (RECOVER)", **NIH R01MD018424** (**Role: Site PI**, PI: Prof. Nawar Shara from Georgetown University, Total: $3,000,000, Personal share: $323,695)   2023 -- 2027

External Grant: Pending

"Treatment-Related Cardiotoxicity Risk Prediction for Breast Cancer Patients with a Multimodal AI-based System", **NIH/NHLBI R01CA301579-01** (**Role: MPI**, Total: $4,000,000, Personal share: $1,200,000, Notification date: TBD)   pending

Internal Grant: Funded

"TIER 1: Clarity in Complexity: AI-Human Teaming for Uncertainty Visualization of Multiple Forecasts." **Northeastern University Tier-1 Research Grant**. (**Role: CO-PI,** PI: Prof. Lace Padilla from Northeastern University, Total: $50,000, Personal share: $25,000)   2024 -- 2025

"The Goal-oriented Autonomous Dialogue System", **RPI-IBM AIRC** (**Role: CO-PI**, PI: Prof. Tomek Strzalkowski from RPI, Total: $125,000, Personal share: $50,000)   2022 -- 2023

PUBLICATIONS

Books

[B1] Fu, Z. and **Wang, D.** (2022). 人机交互之道. *Ways of Knowing in HCI (Chinese Edition)*. Tsinghua University Press, Beijing, China.

Reviewed Articles: Journal Publications (Peer Reviewed, * Equal Contribution)

[J9] Cai, P., Yao, Z., Liu, F., **Wang D.,** et al. (2023) PaniniQA: Enhancing Patient Education Through Interactive Question Answering. *Transactions of the Association for Computational Linguistics, 11, 1518-1536*

[J8] Wu, Q., Sang, Y., **Wang, D.**, & Lu, Z. (2023) Malicious Selling Strategies in E-Commerce Livestream: A Case Study of Alibaba's Taobao and ByteDance's TikTok. *ACM Trans. on Computer-Human Interaction, 30(3), 1-29*.

[J7] Wang, A.*, **Wang, D.*,** Drozal, J., Muller, M., Park, S., Weisz, J., Liu, X., & Wu, L. (2022) Documentation Matters: Human-Centered AI System to Assist Data Science Code Documentation in Computational Notebooks. *ACM Trans. on Computer-Human Interaction, 29(2), 1-33*.

[J6] Zhang, Z., Genc, Y. **Wang, D.,** Ahsen, M. & Fan, X. (2021) Effect of AI Explanations on Human Perceptions of Patient-Facing AI-Powered Healthcare Systems. *Journal of Medical Systems,* 45(6), 64.

[J5] Fan, X., Chao, D., Zhang, Z., **Wang, D.,** Li, X., & Tian, F. (2021). Utilization of Self-Diagnosis Health Chatbots in Real-World Settings: Case Study. *Journal of Medical Internet Research,* 23(1), e19928.

[J4] Xu, Y., **Wang, D.,** Collins, P., Lee, H., & Warschauer, M. (2021). Same benefits, different communication patterns: Comparing Children's reading with a conversational agent vs. a human partner. *Computers & Education*, 161, 104059.

[J3] Zhang, Z., Genc, Y., Xing, A., **Wang, D.,** Fan, X., & Citardi, D. (2020). Lay individuals' perceptions of artificial intelligence (AI)-empowered healthcare systems. *Proceedings of the Association for Information Science and Technology*, 57(1), e326.

[J2] Olson, J. S., **Wang, D.,** Zhang, J., & Olson, G. M. (2017). How People Write Together Now: Beginning the Investigation with Advanced Undergraduates in a Project Course. *ACM Trans. on Computer-Human Interaction (TOCHI)*. 24(1), 1-40.

[J1] **Wang, D.** and Mark, G. (2015). Internet Censorship in China: Examining User Awareness and Attitudes. *ACM Trans. on Computer-Human Interaction,* 22(6), 1-22.

Reviewed Articles: Conference Proceeding Publications (Peer Reviewed, * Equal Contribution)

[C55] Yin, C., et al. (2024). SepsisLab: Early Sepsis Prediction with Uncertainty Quantification and Active Sensing (*currently under review*).

[C54] Lu, Y. et al. (2024). Human Still Wins over LLM: An Empirical Study of Active Learning on Domain-Specific Annotation Tasks (*currently under review*).

[C53] Chan, S. et al. (2024). "Mango Mango, How to Let The Lettuce Dry Without A Spinner?": Exploring User Perceptions of Using An LLM-Based Conversational Assistant Toward Cooking Partner (*currently under review*).

[C52] Mahmood, A. et al. (2024). LLM-Powered Conversational Voice Assistants: Interaction Patterns, Opportunities, Challenges, and Design Guidelines (*currently under review*)

[C51] Zhu, Q., **Wang, D.,** et al. (2024) Towards Feature Engineering with Human and AI's Knowledge: Understanding Data Workers' Perceptions in Human & AI-Assisted Feature Engineering Design. In *Proceedings of the ACM conference on Designing Interactive Systems,* In press.

[C50] Yang, Z., Xu, X., Yao, B., Zhang, S., Rogers, E., Intille, S., ... & **Wang, D.** (2024) Talk2Care: An LLM-based Voice Assistant for Communication between Healthcare Providers and Older Adults. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies,* in press.

[C49] Xu, X., Yao, B., Dong, Y., Gabriel, S., Yu, H., Hendler, J., ... & **Wang, D.** (2024). Mental-LLM: Leveraging Large Language Models for Mental Health Prediction via Online Text Data. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 8(1), 1-32.*

[C48] Yao, B., Chen, G., Zou, R., Lu, Y., Li, J., Zhang, S., ... & **Wang, D.** (2024). More Samples or More Prompt Inputs? Exploring Effective In-Context Sampling for LLM Few-Shot Prompt Engineering. In *Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics*, in press.

[C47] Zhang, S., Yu, J., Xu, X., Yin, C., Lu, Y., Yao, B., ... & **Wang, D.** (2024). Rethinking human-ai collaboration in complex medical decision making: A case study in sepsis diagnosis. In *Proceedings of the 2024 Annual ACM conference on human factors in computing systems,* in press.

[C46] Zhang, Z., Jia, M., Yao, B., Das, S., Lerner, A., **Wang, D.,** & Li, T. (2024). "It's a Fair Game", or Is It? Examining How Users Navigate Disclosure Risks and Benefits When Using LLM-Based Conversational Agents. In *Proceedings of the 2024 Annual ACM conference on human factors in computing systems,* in press.

[C45] Lu, Z., **Wang, D.,** & Yin, M. (2024). Does more advice help? the effects of second opinions in AI-assisted decision making. In *Proceedings of the ACM on Human-Computer Interaction*, (CSCW), in press.

[C44] Sun, Y., Liu, J., Yao, B., Chen, J., **Wang, D**., et al. (2024) Exploring Parent's Needs for Children-Centered AI to Support Preschoolers' Storytelling and Reading Activities. In *Proceedings of the ACM on Human-Computer Interaction, (CSCW)*, in press

[C43] Tan, M., Lee, H., **Wang, D.,** & Subramonyam, H. (2024) Is a Seat at the Table Enough? Engaging Teachers and Students in Dataset Specification for ML in Education. In *Proceedings of the ACM on Human-Computer Interaction, (CSCW),* in press.

[C42] Cardenas, R., Yao, B., **Wang, D.** and Hou, Y. 2023. 'Don't Get Too Technical with Me': A Discourse Structure-Based Framework for Automatic Science Journalism. In *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing,* pages 1186–1202, Singapore. Association for Computational Linguistics.

[C41] Yao, B., Jindal, I., Popa, L., Katsis, Y., Ghosh, S., He, L., Lu, Y., Srivastava, S., Li, Y., Hendler, J. and **Wang, D.** 2023. Beyond Labels: Empowering Human Annotators with Natural Language Explanations through a Novel Active-Learning Architecture. In *Findings of the Association for Computational Linguistics: EMNLP 2023*, pages 11629–11643, Singapore. Association for Computational Linguistics.

[C40] Isaza, P., Xu, G., Oloko, T., Hou, Y., Peng, N. and **Wang, D.** 2023. Are Fairy Tales Fair? Analyzing Gender Bias in Temporal Narrative Event Chains of Children's Fairy Tales. In *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics* (Volume 1: Long Papers), pages 6509–6531, Toronto, Canada. Association for Computational Linguistics.

[C39] Yao, B., Sen, P., Popa, L., Hendler, J. and **Wang, D.** 2023. Are Human Explanations Always Helpful? Towards Objective Evaluation of Human Natural Language Explanations. In *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics* (Volume 1: Long Papers), pages 14698–14713, Toronto, Canada. Association for Computational Linguistics.

[C38] Lam, M. S., Ma, Z., Li, A., Freitas, I., **Wang, D.**, Landay, J. A., & Bernstein, M. S. (2023, April). Model sketching: Centering concepts in early-stage machine learning model design. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (pp. 1-24).

[C37] Jahanbakhsh, F., Katsis, Y., **Wang, D.**, Popa, L., & Muller, M. (2023, April). Exploring the Use of Personalized AI for Identifying Misinformation on Social Media. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (pp. 1-27).

[C36] Sang, Y., Mou, X, Yu, M., **Wang, D.**, Li, J. and Stanton, J. 2022. MBTI Personality Prediction for Fictional Characters Using Movie Scripts. In *Findings of the Association for Computational Linguistics: EMNLP 2022*, pages 6715–6724, Abu Dhabi, United Arab Emirates. Association for Computational Linguistics.

[C35] Sanders, A., Strzalkowski, T., Si, M., Chang, A., Dey, D., Braasch, J. and **Wang, D.** 2022. Towards a Progression-Aware Autonomous Dialogue Agent. In *Proceedings of the 2022 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 1194–1212, Seattle, United States. Association for Computational Linguistics.

[C34] Xie, Y., **Wang, D.**, Chen, P., Xiong, J, Liu, S. and Koyejo, O. 2022. A Word is Worth A Thousand Dollars: Adversarial Attack on Tweets Fools Stock Prediction. *In Proceedings of the 2022 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 587–599, Seattle, United States. Association for Computational Linguistics.

[C33] Zhang, Z., Xu, Y., Wang, Y., Yao, B., Ritchie, D., Wu, T., ... & Li, T. J. J. (2022, April). Storybuddy: A human-ai collaborative chatbot for parent-child interactive storytelling with flexible parental involvement. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (pp. 1-21).

[C32] Zheng, C., **Wang, D**., Wang, A. Y., & Ma, X. (2022, April). Telling stories from computational notebooks: Ai-assisted presentation slides creation for presenting data science work. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (pp. 1-20).

[C31] Zhao, Z., Hou, Y, **Wang, D.**, Yu, M., Liu, C and Ma, X. 2022. Educational Question Generation of Children Storybooks via Question Type Distribution Learning and Event-centric Summarization. In *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics* (Volume 1: Long Papers), pages 5073–5085, Dublin, Ireland.

[C30] Yao, B., **Wang, D.**, Wu, T., Zhang, Z., Li, T., Yu, M. and Xu, Y. 2022. It is AI's Turn to Ask Humans a Question: Question-Answer Pair Generation for Children's Story Books. In *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics* (Volume 1: Long Papers), pages 731–744, Dublin, Ireland. Association for Computational Linguistics.

[C29] Xu, Y., **Wang, D.**, Yu, M, Ritchie, D., Yao, B., Wu, T., Zhang, Z., Li, T., Bradford, N., Sun, B., Hoang, T., Sang, Y., Hou, Y., Ma, X., Yang, D., Peng, N., Yu, Z. and Warschauer, M. 2022. Fantastic Questions and Where to Find Them: FairytaleQA – An Authentic Dataset for Narrative Comprehension. In *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics* (Volume 1: Long Papers), pages 447–460, Dublin, Ireland. Association for Computational Linguistics.

[C28] **Wang, D.**, Muller, M., Yang, Q., Wang, Z., Tan, M., & Hobson, S. (2022). Organizational Distance Also Matters: How Organizational Distance Among Industrial Research Teams Affect Their Research Productivity. In *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), 1-18.

[C27] **Wang, D**., Wang, H., Yu, M., Ashktorab, Z., & Tan, M. (2022). Group chat ecology in enterprise instant messaging: How employees collaborate through multi-user chat channels on slack. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW1), 1-14.

[C26] Liu, X., **Wang, D.**, Wang, A, Hou, Y. and Wu, L. 2021. HAConvGNN: Hierarchical Attention Based Convolutional Graph Neural Network for Code Documentation Generation in Jupyter Notebooks. In *Findings of the Association for Computational Linguistics: EMNLP 2021*, pages 4473–4485, Punta Cana, Dominican Republic. Association for Computational Linguistics.

[C25] Sun, E., Hou, Y., **Wang, D**., Zhang, Y., and Wang, N. 2021. D2S: Document-to-Slide Generation Via Query-Based Text Summarization. In *Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, pages 1405–1418, Online. Association for Computational Linguistics.

[C24] Wang, L., **Wang, D.**, Tian, F., Peng, Z., Fan, X., Zhang, Z., ... & Wang, H. (2021). Cass: Towards building a social-support chatbot for online health community. *Proceedings of the ACM on Human-Computer Interaction, 5(CSCW1)*, 1-31.

[C23] **Wang, D.**, Wang, L., Zhang, Z., Wang, D., Zhu, H., Gao, Y., ... & Tian, F. (2021, May). "Brilliant AI doctor" in rural clinics: challenges in AI-powered clinical decision support system deployment. In *Proceedings of the 2021 CHI conference on human factors in computing systems* (pp. 1-18).

[C22] Piorkowski, D., Park, S., Wang, A. Y., **Wang, D.**, Muller, M., & Portnoy, F. (2021). How ai developers overcome communication challenges in a multidisciplinary team: A case study. *Proceedings of the ACM on Human-Computer Interaction, 5(CSCW1)*, 1-25.

[C21] Piorkowski, D., Park, S., Wang, A. Y., **Wang, D.**, Muller, M., & Portnoy, F. (2021). How ai developers overcome communication challenges in a multidisciplinary team: A case study. *Proceedings of the ACM on Human-Computer Interaction, 5(CSCW1)*, 1-25.

[C20] Narkar, S., Zhang, Y., Liao, Q. V., **Wang, D.**, & Weisz, J. D. (2021, April). Model lineupper: Supporting interactive model comparison at multiple levels for automl. In *26th International Conference on Intelligent User Interfaces* (pp. 170-174).

[C19] Drozdal, J., Weisz, J., Wang, D., Gaurave, D., Yao, B., Zhao, C., ... & Su, H. (2020). Exploring Information Needs for Establishing Trust in Automated Data Science Systems. IUI'20.

[C18] Weidele, D. K. I., Weisz, J. D., Oduor, E., Muller, M., Andres, J., Gray, A., & **Wang, D.** (2020, March). AutoAIViz: opening the blackbox of automated artificial intelligence with conditional parallel coordinates. In *Proceedings of the 25th International Conference on Intelligent User Interfaces* (pp. 308-312).

[C17] Mueller, F. F., Lopes, P., Strohmeier, P., Ju, W., Seim, C., Weigel, M., ... & Maes, P. (2020, April). Next steps for human-computer integration. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-15).

[C16] Zhang, A. X., Muller, M., & **Wang, D.** (2020). How do data science workers collaborate? roles, workflows, and tools. *Proceedings of the ACM on Human-Computer Interaction*, *4*(CSCW1), 1-23.

[C15] Liu, S., Ram, P., Vijaykeerthy, D., Bouneffouf, D., Bramble, G., Samulowitz, H., ... & Gray, A. (2020, April). An ADMM based framework for automl pipeline configuration. In *Proceedings of the AAAI Conference on Artificial Intelligence* (Vol. 34, No. 04, pp. 4892-4899).

[C14] Mao, Y., **Wang, D.**, Muller, M., Varshney, K. R., Baldini, I., Dugan, C., & Mojsilović, A. (2019). How data scientistswork together with domain experts in scientific collaborations: To find the right answer or to ask the right question?. *Proceedings of the ACM on Human-Computer Interaction*, *3*(GROUP), 1-23.

[C13] Tan, M, **Wang, D.**, Gao, Y, Wang, H., Potdar, S., Guo, X., Chang, S., and Mo, Y. 2019. Context-Aware Conversation Thread Detection in Multi-Party Chat. In *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, pages 6456–6461, Hong Kong, China. Association for Computational Linguistics.

[C12] Tan, M., Yu, Yang., Wang, H., **Wang, D.**, Potdar, S., Chang, S., and Yu, M. 2019. Out-of-Domain Detection for Low-Resource Text Classification Tasks. In *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, pages 3566–3572, Hong Kong, China. Association for Computational Linguistics.

[C11] Tian, F., Fan, X., Fan, J., Zhu, Y., Gao, J., **Wang, D.**, ... & Wang, H. (2019, May). What can gestures tell? Detecting motor impairment in early Parkinson's from common touch gestural interactions. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (pp. 1-14).

[C10] Wang,H., Tan, M., Yu, M., Chang, S., **Wang, D.**, Xu, K., Guo, X. and Potdar, S., 2019. Extracting Multiple-Relations in One-Pass with Pre-Trained Transformers. In *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics*, pages 1371–1377, Florence, Italy. Association for Computational Linguistics.

[C9] Wang, H., Tan, M., Yu, M., Chang, S., **Wang, D.**, Xu, K., ... & Potdar, S. (2019). Extracting multiple-relations in one-pass with pre-trained transformers. arXiv preprint arXiv:1902.01030.

[C8] Muller, M., Lange, I., **Wang, D.**, Piorkowski, D., Tsay, J., Liao, Q. V., ... & Erickson, T. (2019, May). How data science workers work with data: Discovery, capture, curation, design, creation. In *Proceedings of the 2019 CHI conference on human factors in computing systems* (pp. 1-15).

[C7] Shamekhi, A., Liao, Q. V., **Wang, D.**, Bellamy, R. K., & Erickson, T. (2018, April). Face Value? Exploring the effects of embodiment for a group facilitation agent. In *Proceedings of the 2018 CHI conference on human factors in computing systems* (pp. 1-13).

[C6] Liao, Q. V., Mas-ud Hussain, M., Chandar, P., Davis, M., Khazaeni, Y., Crasso, M. P., ... & Geyer, W. (2018, April). All work and no play?. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (pp. 1-13).

[C5] **Wang, D.**, Tan, H., & Lu, T. (2017). Why users do not want to write together when they are writing together: Users' rationales for today's collaborative writing practices. *Proceedings of the ACM on Human-Computer Interaction, 1(CSCW)*, 1-18.
Best Paper Honorable Mention. 5%.

[C4] Hou, Y., & **Wang, D.** (2017). Hacking with NPOs: collaborative analytics and broker roles in civic data hackathons. *Proceedings of the ACM on Human-Computer Interaction*, 1(CSCW), 1-16.
Best Paper Award. 1%.

[C3] Yim, S., **Wang, D.**, Olson, J., Vu, V., & Warschauer, M. (2017, March). Synchronous writing in the classroom: Undergraduates' collaborative practices and their impact on text quality, quantity, and style. In *Proceedings of the Conference on Computer Supported Cooperative Work (CSCW'17)* (Vol. 10, No. 2998181.2998356).

[C2] **Wang, D.**, Hou, Y., Luo, L., & Pan, Y. (2016). Answerer engagement in an enterprise social question & answering system. *IConference 2016 Proceedings*.

[C1] **Wang, D.**, Olson, J. S., Zhang, J., Nguyen, T., & Olson, G. M. (2015, April). DocuViz: visualizing collaborative writing. In *Proceedings of the 33rd Annual ACM conference on human factors in computing systems* (pp. 1865-1874).

Abstract (Peer Reviewed)

[W13] Wan, H., et al. (2024) Building LLM-based AI Agents in Social Virtual Reality. In *Extended Abstracts of the 2024 CHI Conference on Human Factors in Computing Systems,* in press.

[W12] Li, T., Das, S., Lee, HP., **Wang, D.,** Yao, B., & Zhang, Z. (2024) Human-Centered Privacy Research in the Age of Large Language Models. In *Special Interest of the 2024 CHI Conference on Human Factors in Computing Systems,* in press.

[W11] Wang, A. Y., **Wang, D.**, Liu, X., & Wu, L. (2021, August). Graph-Augmented Code Summarization in Computational Notebooks. In *IJCAI* (pp. 5020-5023).

[W10] Lam, H. T., Buesser, B., Min, H., Minh, T. N., Wistuba, M., Khurana, U., ... & Samulowitz, H. (2021, April). Automated data science for relational data. In *2021 IEEE 37th International Conference on Data Engineering (ICDE)* (pp. 2689-2692). IEEE.

[W9] Afzal, S., Chaudhary, A., Gupta, N., Patel, H., Spina, C., & **Wang, D**. (2021). Data-debugging through interactive visual explanations. In *Trends and Applications in Knowledge Discovery and Data Mining: PAKDD 2021 Workshops*, WSPA, MLMEIN, SDPRA, DARAI, and AI4EPT, Delhi, India, May 11, 2021 Proceedings 25 (pp. 133-142). Springer International Publishing.

[W8] Wang, A. Y., **Wang, D.,** Drozdal, J., Liu, X., Park, S., Oney, S., & Brooks, C. (2021, May). What makes a well-documented notebook? a case study of data scientists' documentation practices in kaggle. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1-7).

[W7] **Wang, D**., Maes, P., Ren, X., Shneiderman, B., Shi, Y., & Wang, Q. (2021, May). Designing AI to work WITH or FOR people?. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1-5).

[W6] Chaudhary, A., Issak, A., Kate, K., Katsis, Y., Valente, A., **Wang, D.,** ... & Li, Y. (2021, May). Autotext: An end-to-end autoai framework for text. In *Proceedings of the AAAI Conference on Artificial Intelligence* (Vol. 35, No. 18, pp. 16001-16003).

[W5] **Wang, D.,** Churchill, E., Maes, P., Fan, X., Shneiderman, B., Shi, Y., & Wang, Q. (2020, April). From human-human collaboration to Human-AI collaboration: Designing AI systems that can work together with people. In *Extended abstracts of the 2020 CHI conference on human factors in computing systems* (pp. 1-6).

[W4] **Wang, D.,** Ram, P., Weidele, D. K. I., Liu, S., Muller, M., Weisz, J. D., ... & Amini, L. (2020, March). Autoai: Automating the end-to-end ai lifecycle with humans-in-the-loop. In *Proceedings of the 25th International Conference on Intelligent User Interfaces Companion* (pp. 77-78).

[W3] Fan, X., Yao, J., Tu, H., & **Wang, D**. (2020, April). Chinese CHI 2020 Workshop. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-5).

[W2] Jacques, R., Følstad, A., Gerber, E., Grudin, J., Luger, E., Monroy-Hernández, A., & **Wang, D**. (2019, May). Conversational agents: Acting on the wave of research and development. In *Extended Abstracts of the 2019 CHI conference on human factors in computing systems* (pp. 1-8).

[W1] Tian, F., Ren, X., Fan, X., Li, W., Mi, H., Lu, T., ... & **Wang, D**. (2019, May). HCI in China: Research agenda, education curriculum, industry partnership, and communities building. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems* (pp. 1-8).

PATENTS (57 Filed, 34 Granted by now)

[P57] Zhenfang Chen, et al. OBJECT-CENTRIC AND RELATION-CENTRIC GRAPH NEURAL NETWORKS FOR PHYSICAL PROPERTY DISCOVERY. IBM. Filed 2022. US-20230306738-A1

[P56] Zhenfang Chen, et al. MODULARIZED ATTENTIVE GRAPH NETWORKS FOR FINE-GRAINED REFERRING EXPRESSION COMPREHENSION. IBM Filed 2022. US-20240111950-A1

[P55] Wu; Bo et al. COUNTERFACTUAL DEBIASING INFERENCE FOR COMPOSITIONAL ACTION RECOGNITION. IBM. Filed 2022. US-20230368529-A1

[P54] Qian Pan, et al. ASSERTIVENESS MODULE FOR DEVELOPING MENTAL MODEL. IBM. Filed 2022. US-20230239258-A1. **Granted 2023-11-21. US-11824819-B2**

[P53] Bo Wu, Chuang Gan, Zhenfang Chen, **Dakuo Wang**. Transformers for Real World Video Question Answering. IBM. Filed 2021. US-20230136515-A1

[P52] **Dakuo Wang**, Udayan Khurana, Chuang Gan, Gregory Bramble, Abel Valente, Arunima Chaudhary, Carolina Maria Spina, Micah Smith. Composite Feature Engineering. IBM. Filed 2021. US-20230153634-A1

[P51] Daniel Weidele, Lisa Amini, Udayan Khurana, Takaaki Tateishi, Toshihiro Takahashi, Horst Samulowitz, Kavitha Sriniva, **Dakuo Wang**, Abel Valente, Arunima Chaudhary, Carolina Spina. PERFORMING AUTOMATED SEMANTIC FEATURE DISCOVERY. IBM. To be filed 2021. US-20230177032-A1

[P50] **Dakuo Wang**, ANBANG XU, Mo Yu, Chuang Gan, Xiaotong LIU, Haibin Liu. Automated Generation of Dialogue Flow from Documents. IBM. Filed 2021. US-20230135625-A1

[P49] **Dakuo Wang**, Mo Yu, Chuang Gan, ANBANG XU, Xiaotong LIU, Haibin Liu. AUTOMATIC GENERATION OF QUESTION ANSWER PAIRS. IBM. Filed 2021. US-20230133392-A1

[P48] Bo Wu, Chuang Gan, **Dakuo Wang**, Zhenfang Chen. NEURAL-SYMBOLIC ACTION TRANSFORMERS FOR VIDEO QUESTION ANSWERING. IBM. Filed 2021. US-20230027713-A1

[P47] **Dakuo Wang**, Udayan Khurana, Daniel Karl I. Weidele, Arunima Chaudhary, Carolina Maria Spina, Abel Valente, Chuang Gan, Horst Cornelius Samulowitz, Lisa Amini. INTERACTIVE FEATURE ENGINEERING IN AUTOMATIC MACHINE LEARNING WITH DOMAIN KNOWLEDGE. IBM. Filed 2021. US-20220366269-A1

[P46] Bo Wu, Chuang Gan, **Dakuo Wang**, Kaizhi Qian. SKELETON-BASED ACTION RECOGNITION USING BI-DIRECTIONAL SPATIAL-TEMPORAL TRANSFORMER. IBM. Filed 2021. US-20220374629-A1. **Granted 2023-12-26. US-11854305-B2**

[P45] **Dakuo Wang**, Mo Yu, Chuang Gan, Bo Wu. AUTOMATED CONVERSATIONAL RESPONSE GENERATION. IBM. Filed 2021. US-20220377028-A1. **Granted 2023-08-22. US-11736423-B2**

[P44] **Dakuo Wang**, Mo Yu, Chuang Gan, Saloni Potdar. GENERATING QUESTION ANSWER PAIRS. IBM. Filed 2021. US-20220358851-A1.

[P43] **Dakuo Wang**, Yufang Hou, XinRu Wang, Yunfeng Zhang, Chuang Gan, Edward Sun. AUTOMATIC GENERATION OF PRESENTATION SLIDES FROM DOCUMENTS. IBM. Filed 2021. US-20220269713-A1. **Granted 2022-10-25. US-11481425-B2**

[P42] Chuang Gan, **Dakuo Wang**, Antonio Jose Jimeno Yepes, Bo Wu. UNSUPERVISED VIDEO REPRESENTATION LEARNING. IBM. Filed 2021. US-20220309278-A1. **Granted 2023-11-14. US-11816889-B2**

[P41] **Dakuo Wang**, Kiran A Kate, Arunima Chaudhary, Abel Valente, Ioannis Katsis, Chuang Gan, Bei Chen. Hybrid Model and Architecture Search for Automated Machine Learning Systems. IBM. Filed 2021. US-20220300821-A1

[P40] LINGFEI WU, Lei Yu, Chen Wang, **Dakuo Wang**. VISUAL QUESTION GENERATION WITH ANSWER-AWARENESS AND REGION-REFERENCE. IBM. Filed 2020. US-20220245838-A1.

[P39] Bo Wu, Chuang Gan, Tengfei Ma, **Dakuo Wang**. Video frame Synthesis using Tensor Neural Network. IBM. Filed 2020. US-20220103761-A1. **Granted 2023-01-10. US-11553139-B2**

[P38] Bei Chen, **Dakuo Wang**, Martin Wistuba, Beat Buesser, Long VU, Chuang Gan, Mathieu Sinn. AUTOMATED DEEP LEARNING ARCHITECTURE SELECTION FOR TIME SERIES PREDICTION WITH USER INTERACTION. IBM. Filed 2020. US-20220172038-A1

[P37] **Dakuo Wang**, Sijia Liu, Abel Valente, Chuang Gan, Bei Chen, Dongyu Liu, Yi Sun. INTERPRETABLE VISUALIZATION SYSTEM FOR GRAPH NEURAL NETWORK. IBM. Filed 2020. US-20220101120-A1.

[P36] Bo Wu, Chuang Gan, Yang Zhang, **Dakuo Wang**. COARSE-TO-FINE ATTENTION NETWORKS FOR LIGHT SIGNAL DETECTION AND RECOGNITION. IBM. Field 2020. US-20220076035-A1. Filed 2023. US-20230394846-A1. **Granted 2023-08-29 US-11741722-B2.**

[P35] **Dakuo Wang**, LINGFEI WU, Xuye Liu, Yi Wang, Chuang Gan, Jing Xu, Xue Ying Zhang, Jun Wang, Jing James Xu. LEARNING-BASED AUTOMATED MACHINE LEARNING CODE ANNOTATION WITH GRAPH NEURAL NETWORK. IBM. Filed 2020. US-20220138266-A1. **Granted 2024-03-12. US-11928156-B2**

[P34] **Dakuo Wang**, LINGFEI WU, Yi Wang, Xuye Liu, Chuang Gan, Si Er Han, Bei Chen, Ji Hui Yang. Learning-Based Automated Machine Learning Code Annotation in Computational Notebooks. IBM. Filed 2020. US-20220113964-A1. **Granted 2022-06-14. US-11360763-B2**

[P33] Bo Wu, Chuang Gan, **Dakuo Wang**, Rameswar Panda. GRADIENT-EMBEDDED VIDEO ANOMALY DETECTION. IBM. Filed 2020. **Granted 2021-12-28. US-11210775-B1.**

[P32] Arunima Chaudhary, **Dakuo Wang**, Abel Valente, Carolina Maria Spina, Hima Patel, Nitin Gupta, Gregory Bramble, Horst Cornelius Samulowitz, Sameep Mehta, Theodoros Salonidis, Daniel M. Gruen, Chuang Gan. AUTOMATED DATA QUALITY INSPECTION AND IMPROVEMENT FOR AUTOMATED MACHINE LEARNING. IBM. Filed 2020. US-20220164698-A1

[P31] Si Er Han, Bei Chen, Jing Xu, Jing James Xu, Xue Ying Zhang, Jun Wang, Ji Hui Yang, **Dakuo Wang**. INTERACTIVE DECISION TREE MODIFICATION. IBM. Filed 2021. US-20220358399-A1

[P30] Chuang Gan, **Dakuo Wang**, Yang Zhang, Bo Wu, Xiaoxiao Guo. DUAL-MODALITY RELATION NETWORKS FOR AUDIO-VISUAL EVENT LOCALIZATION. IBM. Filed 2020. US-20220044022-A1. **Granted 2023-05-30. US-11663823-B2**

[P29] **Dakuo Wang**, Chuang Gan, Gregory Bramble, Lisa Amini, Horst Cornelius Samulowitz, Kiran A Kate, Bei Chen, Martin Wistuba, Alexandre Evfimievski, Ioannis Katsis, Yunyao Li, Adelmo Cristiano Innocenza Malossi, Andrea Bartezzaghi, Ban Kawas, Sairam Gurajada, Lucian Popa, Tejaswini Pedapati, Alexander Gray. USING META-LEARNING TO OPTIMIZE AUTOMATIC SELECTION OF MACHINE LEARNING PIPELINES. IBM. Filed 2020. US-20220051049-A1

[P28] Arunima Chaudhary, **Dakuo Wang**, David John Piorkowski, Daniel M. Gruen, Chuang Gan, Peter Daniel Kirchner, Gregory Bramble, Bei Chen, Abel Valente, Carolina Maria Spina, John Thomas Richards, Abhishek Bhandwaldar. AUTOMATED ANALYSIS GENERATION FOR MACHINE LEARNING SYSTEM. IBM. Filed 2020. US-20220083881-A1

[P27] **Dakuo Wang**, Arunima Chaudhary, Ji Hui Yang, Bei Chen, Gregory Bramble, Chuang Gan, Uri Kartoun, Long VU. AUTOMATED MODEL PIPELINE GENERATION WITH ENTITY MONITORING, INTERACTION, AND INTERVENTION. IBM. Filed 2020. US-20220051112-A1

[P26] Long VU, Bei Chen, Xuan-Hong Dang, Peter Daniel Kirchner, SYED YOUSAF SHAH, Dhavalkumar C. Patel, Si Er Han, Ji Hui Yang, Jun Wang, Jing James Xu, **Dakuo Wang**, Gregory Bramble, Horst Cornelius Samulowitz, Saket Sathe, Wesley M. Gifford, Petros ZERFOS. Automated time series forecasting pipeline generation. IBM. Filed 2021. US-20220327058-A1

[P25] Bei Chen, Long VU, SYED YOUSAF SHAH, Xuan-Hong Dang, Peter Daniel Kirchner, Si Er Han, Ji Hui Yang, Jun Wang, Jing James Xu, **Dakuo Wang**, Dhavalkumar C. Patel, Gregory Bramble, Horst Cornelius Samulowitz, Saket Sathe, Chuang Gan. AUTOMATED MACHINE LEARNING PIPELINE GENERATION. IBM. Filed 2020. US-20220036246-A1. **Granted 2023-04-04. US-11620582-B2**

[P24] **Dakuo Wang**, Bei Chen, Ji Hui Yang, Abel Valente, Arunima Chaudhary, Chuang Gan, John Dillon Eversman, Voranouth Supadulya, Daniel Karl I. Weidele, Jun Wang, Jing James Xu, Dhavalkumar C. Patel, Long VU, SYED YOUSAF SHAH, Si Er Han. VISUALIZATION OF A MODEL SELECTION PROCESS IN AN AUTOMATED MODEL SELECTION SYSTEM. IBM. Filed 2020. US-20220036610-A1. **Granted 2023-06-27. US-11688111-B2**

[P23] **Dakuo Wang**, Mo Yu, Arunima Chaudhary, Chuang Gan, Qian Pan, Daniel Karl I. Weidele, Abel Valente, Ji Hui Yang. AUTOMATED DATA TABLE DISCOVERY FOR AUTOMATED MACHINE LEARNING. IBM. Filed 2020. US-20220044136-A1. **Granted 2023-04-04. US-11620550-B2**

[P22] **Dakuo Wang**, Arunima Chaudhary, Chuang Gan, Mo Yu, Qian Pan, Sijia Liu, Daniel Karl I. Weidele, Abel Valente. AUTOMATIC FORMULATION OF DATA SCIENCE PROBLEM STATEMENTS. IBM. Filed 2020. US-20220043978-A1. **Granted 2023-09-19. US-11763084-B2**

[P21] Parikshit Ram, **Dakuo Wang**, Deepak Vijaykeerthy, Vaibhav Saxena, Sijia Liu, Arunima Chaudhary, Gregory Bramble, Horst Cornelius Samulowitz, Alexander Gray. MACHINE LEARNING WITH MULTIPLE CONSTRAINTS. IBM. Filed 2020. US-20220076144-A1

[P20] Daniel Weidele, Parikshit Ram, **Dakuo Wang**, Abel Valente, Arunima Chaudhary. Conditional Parallel Coordinates in Automated Artificial Intelligence with Constraints. IBM. Filed 2020. US-20210304028-A1. **Granted 2023-01-17. US-11556816-B2**

[P19] Chuang Gan, Sijia Liu, Subhro Das, **Dakuo Wang**, Yang Zhang. Graph Convolutional Networks for Video Grounding. IBM Filed 2020. US-20210256059-A1. **Granted 2022-09-13. US-11442986-B2.**

[P18] Yang Zhang, Chuang Gan, **Dakuo Wang**. Generating synchronized sound from videos. IBM. Filed 2020. 16/744471.

[P17] Peter Kirchner, Gregory Bramble, Horst Samulowitz, **Dakuo Wang**, Arunima Chaudhary, Gregory Filla. CODE GENERATION FOR AUTO-AI. IBM Filed 2020. US-20220004914-A1. **Granted 2024-01-02. US-11861469-B2**

[P16] **Dakuo Wang**, Ming Tan, Chuang Gan, Jason Tsay, Gregory Bramble. TRANSFER LEARNING ACROSS AUTOMATED MACHINE LEARNING SYSTEMS. IBM Filed 2020. US-20210271966-A1

[P15] **Dakuo Wang**, Haoyu Wang, Chuang Gan, Ming Tan, Arunima Chaudhary, Lin Ju. Personalized Automated Machine Learning. IBM Filed 2020. US-20210271956-A1. **Granted 2022-07-05. US-11379710-B2.**

[P14] Theodoros Salonidis, John Dillon Eversman, **Dakuo Wang**, Alex Swain, GREGORY BRAMBLE, Lin Ju, NICHOLAS MAZZITELLI, Voranouth Supadulya. AUTOMATED ARTIFICIAL INTELLIGENCE RADIAL VISUALIZATION. IBM. Filed 2019. US-20210065048-A1. **Granted 2022-11-29. US-11514361-B2**

[P13] Chuang Gan, Ming Tan, Yang Zhang, **Dakuo Wang** FRAMEWORK FOR FEW-SHOT TEMPORAL ACTION LOCALIZATION. IBM. Filed 2019. US-20210124987-A1. US-20220012527-A1. **Granted 2021-11-02. US-11164039-B2. Granted 2023-08-15. US-11727686-B2**

[P12] **Dakuo Wang**, Ming Tan, Chuang Gan, Haoyu Wang. Summarization of Group Chat Threads. IBM. Filed 2019. US-20210103636-A1. **Granted 2022-02-01. US-11238236-B2**

[P11] Ming TAN, Haoyu Wang, **Dakuo Wang**, Chuang Gan. DETERMINATION OF CONVERSATION THREADS IN A MESSAGE CHANNEL BASED ON CONVERSATIONAL FLOW AND SEMANTIC SIMILARITY OF MESSAGES. IBM. Filed 2019. US-20210067477-A1. US-20210266282-A1. **Granted 2021-07-06. US-11057330-B2. Granted 2023-06-27. US-11689488-B2**

[P10] Haoyu Wang, Ming TAN, **Dakuo Wang**, Chuang Gan, Saloni Potdar. INTENT CLASSIFICATION DISTRIBUTION CALIBRATION. IBM. Filed 2019. US-20210049502-A1. **Granted 2022-09-06. US-11436528-B2**

[P9] **Dakuo Wang**, Ming TAN, Chuang Gan, Haoyu Wang, Mo Yu. NATURAL LANGUAGE INTERACTION WITH AUTOMATED MACHINE LEARNING SYSTEMS. IBM. Filed 2019. US-20210064666-A1.

[P8] Yang Zhang, Chuang Gan, Sijia Liu, **Dakuo Wang**. Synchronized Sound Generation from Videos. IBM. Filed 2019. US-20210035599-A1. **Granted 2021-06-15. US-11039043-B1. Granted 2022-03-15. US-11276419-B2.**

[P7] **Dakuo Wang**, Ming Tan, Mo Yu, Haoyu Wang, Yupeng Gao, Chuang Gan. CONTEXT-AWARE CONVERSATION THREAD DETECTION FOR COMMUNICATION SESSIONS. IBM. Filed 2019. US-20210110266-A1. **Granted 2022-03-29. US-11288578-B2**

[P6] Ming TAN, **Dakuo Wang**, Mo Yu, Haoyu Wang, Yang Yu, Shiyu Chang, Saloni Potdar. OUT-OF-DOMAIN ENCODER TRAINING. IBM. Filed 2019. US-20210034965-A1. **Granted 2023-05-09. US-11645514-B2**

[P5] Ming TAN, **Dakuo Wang**, Mo Yu, Chuang Gan, HAOYU WANG, Shiyu Chang. FACILITATING DETECTION OF CONVERSATION THREADS IN A MESSAGING CHANNEL. IBM. Filed 2019. US-20200356629-A1. **Granted 2022-03-01. US-11263402-B2**

[P4] **Dakuo Wang,** Chuang Gan, Michael Muller, ZIJUN WANG, Daniel M. Gruen. CALCULATING ONLINE SOCIAL NETWORK DISTANCE BETWEEN ENTITIES OF AN ORGANIZATION. IBM. Filed 2019. US-20200320462-A1.

[P3] Chuang Gan, **Dakuo Wang**, Sijia Liu, Yang Zhang. Relation Attention Module for Temporal Action Localization. IBM. US-20200175281-A1

[P2] Chuang Gan, Yang Zhang, Sijia Liu, **Dakuo Wang**. ITERATIVE APPROACH FOR WEAKLY-SUPERVISED ACTION LOCALIZATION. IBM. Filed 2019. US-20200286243-A1. **Granted 2022-02-22. US-11257222-B2.**

[P1] Sijia Liu, Quanfu Fan, Chuang Gan, **Dakuo Wang**. Quantifying Vulnerabilities of Deep Learning Computing Systems to Adversarial Perturbations. IBM. Filed 2019. US-20200285952-A1. **Granted 2022-01-18. US-11227215-B2**

FELLOWSHIPS & AWARDS

[Master Inventor](#). IBM.	2022
IBM Corporate Technical Awards on "AutoAI", IBM. 175/350,000 employees.	2021
Outstanding Technical Achievement Award "Leadership in Automating the AI Lifecycle", IBM Research. 16/260 teams.	2020
Outstanding Technical Achievement Award "Author Workbench", IBM Research. 16/260 teams.	2020
ACM Conference on Human Factors in Computing Systems (CHI), Early Career Consortium ($2,000)	2017
ACM Conference on Human Factors in Computing Systems (CHI), Doctoral Consortium ($2,000)	2016
ACM Conference on Computer-Supported Cooperative Work (CSCW), Doctoral Consortium ($2,000)	2016
iConference, Doctoral Consortium ($1,500)	2016
Center for Organizational Research Grant ($1,000)	2014 — 2015
1st Place at Google Web Hackathon @ UCI	March 2015

TEACHING

ARTG 5000: Special Topic in Design: Human-Centered AI System Design and Development (16 students) Instructor at Northeastern University CAMD, U.S.A.	Spring 2024
(New Course) CS 7170: Human-Centered AI System Development and Research (9 students) Instructor at Northeastern University Khoury College of CS, U.S.A.	Fall 2023
(New Course) ARTG 5000: Special Topic in Design: Human-Centered AI System Design and Development (14 students) Instructor at Northeastern University CAMD, U.S.A.	Spring 2023
ITC 6020 (Overloads): Systems Analysis & Design (ONLINE, 14 students) Instructor at Northeastern University College of Professional Studies, U.S.A.	Summer 2022
ITC 6020 (Overloads): Systems Analysis & Design (10 students) Instructor at Northeastern University College of Professional Studies, U.S.A.	Spring 2022

ITC 6020 (Overloads): Systems Analysis & Design (ONLINE, 18 students)   Winter 2022
Instructor at Northeastern University College of Professional Studies, Toronto, Canada.

ITC 6020 (Overloads): Systems Analysis & Design (23 students)   Winter 2022
Instructor at Northeastern University College of Professional Studies, U.S.A.

INF 133: Projects in Human Computer Interaction   Spring 2014
Teaching Assistant for Alfred Kobsa. Received 8.11/9.0 overall rating from student survey.

ICS 11: Internet Public Policy   Winter 2014
Teaching Assistant for Geoffrey Bowker. Received 8.10/9.0 overall rating from student survey.

INF 131: User Interaction Software Design   Fall 2013
Teaching Assistant for Donald Patterson.

ECE 10: Computer Methods in Electrical Computer Engineering   Fall 2011
Teaching Assistant for Phillip Sheu.

ADVISING

List of Student Mentees

Ziyi Wang (Ph.D.) Northeastern University	2024
Jiaju Chen (M.S.) East China Normal University (visiting student at Northeastern)	2024
Ruishi Zou (M.S.) Tongji University(visiting student at Northeastern)	2024
Shihan Fu (Ph.D.) Northeastern University	2024
Siyi Reyna Wu (Ph.D.) University of Toronto (visiting student at Northeastern)	2023
Yuxuan Lu (Ph.D.) Northeastern University	2023
Ziqi Yang (M.S.) University of Michigan	2023
Farnaz Jahanbakhsh (Ph.D.) MIT	2022
Fan Wang (M.S.) Peking University	2022
Zheng Zhang (Ph.D.) Notre Dame University	2022
Zhenjie Zhao (Ph.D.) HKUST	2021
Chengbo Zheng (Ph.D.) HKUST	2021
Qian Zhu (Ph.D.) HKUST	2021
Bingsheng Arthur Yao (Ph.D.) RPI	2021
Yong Xie (Ph.D.) UIUC	2021
Soyun Park (Ph.D.) MIT	2020
April Yi Wang (Ph.D.) University of Michigan	2020
Xuye Liu (M.S.) RPI	2020
Yifan Gao (M.S.) Stony Brook U.	2019
Liuping Wang (Ph.D.) Chinese Academy of Science.	2019
Shuai Ma (M.S.) Chinese Academy of Science.	2019
Haokuan Hou (B.S.) MIT.	2018
Yaoli Mao (Ph.D.) Columbia University.	2017
Ameneh Shamekhi, (Ph.D.) Northeastern University.	2016
Zichao Yuan, (B.S.) UC Irvine.	2016

Kenny Khoa Pham, (B.S.) UC Irvine.	2015
Trung Nguyen, (B.S.) UC Irvine.	2014
James Vinh, (B.S.) UC Irvine.	2014

SERVICE & OTHER PROFESSIONAL ACTIVITIES

University Service

Northeastern University Program Director of Graduate Certificate in AI Applications	since 2024 2024
Northeastern University **Faculty Senator** (representing CAMD)	2024
Faculty Hiring Committee at College of Art, Media and Design Northeastern University	2024 2023
Faculty Hiring Committee at Khoury School of Computer Sciences Northeastern University	2024 2023
Faculty Hiring Committee at Khoury School of Computer Sciences Northeastern University	
Organizing Northeastern University Reception at ACM CHI'2024 in Hawaii (190 attendees)	
Organizing Northeastern University Reception at ACM CHI'2023 in Germany (350 attendees)	

Discipline Service: Steering Committee

ACM SIGCHI Boston Chapter (BostonCHI) Steering Committee: Treasure (elected)	2024 -- 2026 2019 -- 2022
ACM SIGCHI China Chapter Steering Committee: Vice-President (elected)	2018 -- 2022
International Chinese Association of CHI (ICACHI) Steering Committee Member (elected)	

Discipline Service: Conference Organizing Committee

ACM IUI 2025 Conference Program Co-Chair	2025
ACM IUI 2024 Conference Co-Chair in Proceeding	2024
AAAI ICWSM 2023 Tutorial Co-Chair	2023
ACM IUI 2023 Conference Chair in Proceeding	2023
ACM CHI 2023 Conference Co-Chair in Workshop	2023
AAAI ICWSM 2022 Global Equity Chair	2022
ACM CHI 2022 Conference Co-Chair in Special Interest Group	2022
ACM CSCW 2022 Conference Co-Chair in Sponsorship	2022
AAAI ICWSM 2021 Global Equity Chair	2021
ACM CSCW 2020 Conference Co-Chair in Demo	2020
ECSCW 2020 Conference Co-Chair in Sponsorship	2020
ACM GROUP 2020 Conference Co-Chair in Workshop	2020
ACM CHI 2019 Conference Co-Chair in Social Media	2019

Discipline Service: Journal Editorial Board

International Journal of Human-Computer Studies	since 2023

Discipline Service: Conference Program Committee
Program Committee (Associate/Area Chair) for **ACM CHI** '16, 17, 18, 19, 20, 21;
Program Committee (Associate/Area Chair) for **ACM CSCW** '16, 17, 18, 19, 20,

21, 22;
Program Committee (Area Chair) for **ACL ARR** '24
Reviewer for 100+ papers TOCHI, CHI, CSCW, ECSCW, GROUP, HRI, UIST,
IUI, iConference, ACL, EMNLP, NAACL ...

Memberships in Professional Associations
Senior Member in Institute of Electrical and Electronics Engineers (IEEE): CS
Chapter
Senior Member in Association for Computer Machinery (ACM): SIGCHI
Member in Association for Computational Linguistics (ACL)

INVITED TALKS

From Human-Human Collaboration to Human-AI Collaboration in the Era of LLM **Opening Keynote Talk** at *European CSCW* (*ECSCW'24*) Conference, Italy	June 2024
From Human-Human Collaboration to Human-AI Collaboration in the Era of LLM Invited Talk at Adobe, U.S.A.	April 2024
From Human-Human Collaboration to Human-AI Collaboration in the Era of LLM Invited Talk at Meta AR/VR Research Lab, U.S.A.	April 2024
From Human-Human Collaboration to Human-AI Collaboration in the Era of LLM Invited Talk at Amazon AWS Search Lab, U.S.A.	January 2024
From Human-Human Collaboration to Human-AI Collaboration in the Era of LLM Panel Talk at University of Toronto Responsible AI and Data Science Workshop, Canada	January 2024
From Human-Human Collaboration to Human-AI Collaboration Dagstuhl Seminar on "Future of Work", Germany.	November 2023
ChatGPT and Human-AI Collaboration Invited Talk at AI for Health Equity Symposium (AIHES) 2023, Online	June 2023
From Human-Human Collaboration to Human-AI Collaboration **Keynote** at AsianCHI Symposium at ACM CHI'23, Germany	May 2023
Designing Human-Centered AI Systems for Human-AI Collaboration Invited Talk at Stanford University, U.S.A.	July 2022
Designing Human-Centered AI Systems for Human-AI Collaboration Invited Talk at Sigma Computing Lab, U.S.A.	August 2022
Designing Human-Centered AI Systems for Human-AI Collaboration Invited Talk at Megagon Labs, U.S.A.	September 2022

Designing Human-Centered AI Systems for Human-AI Collaboration May 2022
Invited Talk at Stanford University, U.S.A.

Designing Human-Centered AI Systems for Human-AI Collaboration April 2022
Invited Talk at UCSB, U.S.A.

Designing Human-Centered AI Systems for Human-AI Collaboration April 2022
Invited Talk at University of Maryland College Park, U.S.A.

Designing Human-Centered AI Systems for Human-AI Collaboration March 2022
Invited Talk at University of Minnesota, U.S.A.

Designing Human-Centered AI Systems for Human-AI Collaboration March 2022
Invited Talk at Northeastern University, U.S.A.

Fireside Chat on Human-Centered AI March 2022
Invited Panelist at TaiwanCHI Chapter, Online

Designing Human-Centered AI Systems for Human-AI Collaboration March 2022
Invited Talk at Michigan State University, U.S.A.

Designing Human-Centered AI Systems for Human-AI Collaboration March 2022
Invited Talk at Vanderbilt University, U.S.A.

Designing Human-Centered AI Systems for Human-AI Collaboration February 2022
Invited Guest Lecture at RPI, U.S.A.

Designing Human-Centered AI Systems for Human-AI Collaboration February 2022
Invited Talk at Ohio State University, U.S.A.

Designing Human-Centered AI Systems for Human-AI Collaboration February 2022
Invited Talk at Purdue University, U.S.A.

Human-Centered AI in Data Science October 2021
Invited Talk at UCLA, U.S.A.

Human-Centered AI in Data Science October 2021
Invited Talk at UC Irvine, U.S.A.

Human-AI Collaboration in Automated Machine Learning March 2020
Invited Talk at Pace University, U.S.A.

Human-AI Collaboration November 2019
Invited Talk at ACM SIGCHI China Chapter 15th Anniversary Symposium at
Chinese Academy of Science, China.

Human-AI Collaboration October 2019
Guest Lecture at Peking University, China. Host: Prof. Baoquan Chen.

Introduction to HCI and CSCW Summer 2019
CSCW Summer School at Fudan University, China.

Human AI Collaboration in Workplace, Data Science, and Healthcare Summer 2019
Feature Talk at Human Computer Interaction Consortium (HCIC), Pajaro Dunes,
CA

Human-AI Collaboration as a New Paradigm of Human Computer Interaction   December 2018
Guest Lecture at Chinese Academy of Science, China. Host: Prof. Xiangmin Fan.

Human-AI Collaboration as a New Paradigm of Human Computer Interaction.   August 2018
Feature Talk at 14th ChineseCSCW in Guilin, China.

Human AI Collaboration   May 2018
Dagstuhl Seminar (17392), Dagstuhl, Germany

Today's and Future's Computer-Supported Cooperative Work   September 2017
Guest Lecture at College of Computer Science, Fudan University, China. Host: Prof. Tun Lu.

Exploring and Supporting Today's Collaborative Writing   May 2016
Feature Talk at Human Computer Interaction Consortium (HCIC), Pajaro Dunes, CA

Introduction to Human Computer Interaction and Computer-Supported Cooperative Work   May 2013
Guest Lecture at College of Computer Science, Beijing University of Technology. Host: Hongyu Gao.

Introduction to Human Computer Interaction and Computer-Supported Cooperative Work   May 2013
Guest Lecture at the School of Economic and Management, Beijing University of Posts and Telecommunications. Host: Lianju Ning.

SYSTEMS AVAILABLE TO THE PUBLIC

[DocuViz2,](#) Chrome Plugin Store.
A Chrome browser plugin that provides visualization for Google Docs revision history.

REFERENCES

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Research Staff Member, IBM Research
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