

# Q. Vera Liao

Principal Researcher  
Microsoft Research

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**[Research Interests]** Human-computer interaction, human-AI interaction, AI explainability and transparency, responsible AI, FATE, conversational AI

**[Employment]** **Microsoft Research**, Montreal, Canada 10/2021-present  
*Principal Research, FATE (fairness, accountability, transparency, and ethics in AI) Group*  
Research on FATE topics, focusing on responsible language technologies and generative AI.

**IBM Thomas J. Watson Research Center**, Yorktown Heights, NY 09/2016-10/2021  
*Research Staff Member, HCI Research Lead for explainable and trustworthy AI, Co-Chair for Professional Interest Community of HCI*

Research on human-AI interaction. Topics included explainable AI, conversational agents, and user-centered machine learning. Contributed to IBM Watson Assistant, open-source toolkits for trustworthy AI (AI Explainability 360, AI Uncertainty Quantification 360), and IBM Enterprise Design Thinking.

**IBM Thomas J. Watson Research Center**, Cambridge, MA 05/2015-08/2015  
*Research Intern*

**Palo Alto Research Center (PARC)**, Palo Alto, CA 05/2014-08/2014  
*Research Intern*

**GESIS- – Leibniz-Institute for the Social Sciences**, Cologne, Germany 09/2014-12/2014  
*Visiting Researcher*

**Palo Alto Research Center (PARC)**, Palo Alto, CA 05/2011-08/2011  
*Research Intern*

**NetEase, Inc.**, Guangzhou, China 05/2008-07/2008  
*User Experience Intern*

**[Education]** **University of Illinois at Urbana-Champaign**, Champaign, IL 2011 - 2016  
PhD in Computer Science  
Dissertation: “*Information Behavior Nudging: Theory Driven Design for Exposure to Diverse Opinions*”  
Committee: Wai-Tat Fu (Advisor), Alex Kirlik, Peter Pirolli, Bruce Schatz

**University of Illinois at Urbana-Champaign**, Champaign, IL 2009 - 2011  
Master of Science in Human Factors

**Tsinghua University**, Beijing, China 2005 - 2009  
Bachelor of Science in Industrial Engineering

**[Awards&Grants]** **MSR AI & Society Fellows Program** (PI w/ Kate Crawford, Gonzalo Ramos) 2023  
“Creative-Centered AI: Opportunities and Challenges at the Intersection of Creatives, AI and Society”

**ICML 2023 Workshop on AI+ HCI Best Paper Award Honorable Mention (W.12)** 2023  
10th AAAI Conference on Human Computation and Crowdsourcing

**MSR & MILA Research Grant** (PI w/ AJung Moon, \$75,000) 2022  
“Investigating Interaction-Based Harms in AI Systems”

**AAAI HCOMP 2022 Best Paper Award Honorable Mention (C.39)** 2022  
10th AAAI Conference on Human Computation and Crowdsourcing

**CHI 2021 Best Paper Award Honorable Mention (C.33)** 2021

32<sup>nd</sup> ACM Conference on Human Factors in Computing Systems

**IBM Outstanding Research Accomplishments**

2019, 2020

For research contributions to Watson Assistant and Trusted AI

**CHI 2020 Best Paper Award Honorable Mention (C.28)**

2020

32<sup>nd</sup> ACM Conference on Human Factors in Computing Systems

**Invited Young Researcher**

2020

Heidelberg Laureate Forum 2020

**IUI 2019 Outstanding Paper Award (C.26)**

2019

24<sup>th</sup> ACM Conference on Intelligent User Interface

**CHI Excellent Reviewer**

2017

32<sup>nd</sup> ACM Conference on Human Factors in Computing Systems

**CHI 2014 Best Paper Award Honorable Mention (C.13)**

2014

32<sup>nd</sup> ACM Conference on Human Factors in Computing Systems

**3rd Place in ACM Student Research Competition (P.2)**

2011

ACM CHI Conference 2011, Vancouver, BC

**[Publications]**

**Peer Reviewed Conference Papers**

\* Note: conferences are primary publication venues for Computer Science and HCI research. Most of my papers' authorship is ordered by contribution. I am often the second author for interns' work where I was the lead mentor.

C.51 Generative Echo Chamber? Effect of LLM-Powered Search Systems on Diverse Information Seeking

Nikhil Sharma, **Q Vera Liao**, Ziang Xiao

*ACM Conference on Human Factors in Computing Systems (CHI 2024)*

C.50 The who in explainable ai: How ai background shapes perceptions of ai explanations

Upol Ehsan, Samir Passi, Q Vera Liao, Larry Chan, I Lee, Michael Muller, Mark O Riedl

*ACM Conference on Human Factors in Computing Systems (CHI 2024)*

C.49 Seamful XAI: Operationalizing Seamful Design in Explainable AI

Upol Ehsan, **Q Vera Liao**, Samir Passi, Mark Riedl, Hal Daume III

*ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW2024)*

C.48 Evaluating Evaluation Metrics: A Framework for Analyzing NLG Evaluation Metrics using Measurement Theory

Ziang Xiao, Susu Zhang, Vivian Lai, **Q Vera Liao**

*Conference on Empirical Methods in Natural Language Processing (EMNLP 2023)*

C.47 Understanding the Role of Human Intuition on Reliance in Human-AI Decision-Making with Explanations

Valerie Chen, **Q. Vera Liao**, Jennifer Wortman Vaughan, Gagan Bansal

*ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW2023)*

C.46 Selective Explanation: Leveraging Human Input to Align Explainable AI

Vivian Lai, Yiming Zhang, Chacha Chen, **Q. Vera Liao**, Chenhao Tan

*ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW2023)*

C.45 Sensing Wellbeing in the Workplace, Why and For Whom? Envisioning Impacts with Organizational Stakeholders

Anna Kawakami, Shreya Chowdhary, Shamsi T. Iqbal, **Q. Vera Liao**, Alexandra Olteanu, Jina Suh, Koustuv Saha

*ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW2023)*

- C.44 Towards a Science of Human-AI Decision Making: A Survey of Empirical Studies  
Vivian Lai, Chacha Chen, **Q. Vera Liao**, Alison Smith-Renner, Chenhao Tan  
*ACM Conference on Fairness, Accountability, and Transparency (FAccT 2023)*
- C.43 Designerly Understanding: Information Needs for Model Transparency to Support Design Ideation for AI-Powered User Experience  
**Q. Vera Liao**, Hariharan Subramonyam, Jennifer Wang, Jennifer Wortman Vaughan  
*ACM Conference on Human Factors in Computing Systems (CHI 2023)*
- C.42 fAllureNotes: Supporting Designers in Understanding the Limits of AI Models for Computer Vision Tasks  
Steven Moore, **Q. Vera Liao**, Hariharan Subramonyam  
*ACM Conference on Human Factors in Computing Systems (CHI 2023)*
- C.41 Powering an AI Chatbot with Expert Sourcing to Support Credible Information Access  
Ziang Xiao, Q. Vera Liao, Michelle Zhou, Tyrone ndre Grandison, Yunyao Li  
*ACM International Conference on Intelligent User Interface (IUI 2023)*
- C.40 Understanding Uncertainty: How Lay Decision-makers Perceive and Interpret Uncertainty in Human-AI Decision Making  
Snehal Prabhudesai, Sumit Asthana, Leyao Yang, Xun Huan **Q. Vera Liao**, Nikola Banovic  
*ACM International Conference on Intelligent User Interface (IUI 2023)*
- C.39 Connecting Algorithmic Research and Usage Contexts: A Perspective of Contextualized Evaluation for Explainable AI  
**Q. Vera Liao** Q. Vera Liao, Yunfeng Zhang, Ronny Luss, Finale Doshi-Velez, Amit Dhurandhar  
*AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2022)*  
**\* Best Paper Award Honorable Mention**
- C.38 Designing for Responsible Trust in AI Systems: A Communication Perspective  
**Q. Vera Liao**, S. Shyam Sundar  
*ACM Conference on Fairness, Accountability, and Transparency (FAccT 2022)*
- C.37 Human-AI Collaboration via Conditional Delegation: A Case Study of Content Moderation  
Vivian Lai, Samuel Carton, Rajat Bhatnagar, **Q. Vera Liao**, Yunfeng Zhang, Chenhao Tan  
*ACM Conference on Human Factors in Computing Systems (CHI 2022)*
- C.36 Investigating Explainability of Generative Models for Code through Scenario-Based Design  
Jiao Sun, **Q. Vera Liao**, Michael Muller, Mayank Agarwal, Stephanie Houde, Kartik Talamadupula, Justin D. Weisz  
*ACM International Conference on Intelligent User Interface (IUI 2022)*
- C.35 Human-AI Collaboration for UX Evaluation: Effects of Explanations and Synchronization  
Mingming Fan, Xianyou Yang, Tsz Tung Yu, **Q. Vera Liao**, Jian Zhao  
*ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW2022)*
- C.34 Uncertainty as a Form of Transparency: Measuring, Communicating, and Using Uncertainty  
Umang Bhatt, Javier Antorán, Yunfeng Zhang, **Q. Vera Liao**, Prasanna Sattigeri, Riccardo Fogliato, Gabrielle Gauthier Melançon, Ranganath Krishnan, Jason Stanley, Omesh Tickoo, Lama Nachman, Rumi Chunara, Madhulika Srikumar, Adrian Weller, Alice Xiang  
*AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES2021)*
- C.33 Expanding Explainability: Towards Social Transparency in AI systems  
Upol Ehsan, **Q. Vera Liao**, Michael Muller, Mark Riedl, Justin D. Weisz  
*ACM Conference on Human Factors in Computing Systems (CHI 2021)*  
**\* Best Paper Award Honorable Mention**
- C.32 Model LineUpper: Supporting Interactive Model Comparison at Multiple Levels for AutoML  
Shweta Narkar, Yunfeng Zhang, **Q. Vera Liao**, Dakuo Wang, Justin D. Weisz

*ACM International Conference on Intelligent User Interface (IUI 2021)*

- C.31 Facilitating Knowledge Sharing from Domain Experts to Data Scientists for Building NLP Models  
Soya Park, April Yi Wang, Ban Kawa, **Q. Vera Liao**, David Piorkowski, Marina Danilevsky  
*ACM International Conference on Intelligent User Interface (IUI 2021)*
- C.30 Explainable Active Learning (XAL): Toward AI Explanations as Interfaces for Machine Teachers  
Bhavya Ghai, **Q. Vera Liao**, Yunfeng Zhang, Rachel Bellamy, Klaus Mueller  
*ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2020)*
- C.29 Human-AI Collaboration in a Cooperative Game Setting: Measuring Social Perception and Outcomes  
Zahra Ashktorab, **Q. Vera Liao**, Casey Dugan, James Johnson, Qian Pan, Wei Zhang, Sadhana Kumaravel, Murray Campbell  
*ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2020)*
- C.28 Questioning the AI: Informing Design Practices for Explainable AI User Experiences  
**Q. Vera Liao**, Daniel Gruen, Sarah Miller  
*ACM Conference on Human Factors in Computing Systems (CHI 2020)*  
**\* Best Paper Award Honorable Mention**
- C.27 Effect of Confidence and Explanation on Accuracy and Trust Calibration in AI-Assisted Decision Making  
Yunfeng Zhang, **Q. Vera Liao**, Rachel K.E. Bellamy  
*ACM Conference on Fairness, Accountability, and Transparency (FAT\* 2020, now FAccT)*
- C.26 Resilient Chatbots: Repair Strategy Preferences for Conversational Breakdown  
Zahra Ashktorab, Mohit Jain, **Q. Vera Liao**, Justin D. Weisz  
*ACM Conference on Human Factors in Computing Systems (CHI 2019)*
- C.25 How Data Science Workers Work with Data: Discovery, Capture, Curation, Design, and Creation  
Michael Muller, Ingrid Lange, Dakuo Wang, David Piorkowski, Jason Tsay, **Q. Vera Liao**, Casey Dugan, Thomas Erickson  
*ACM Conference on Human Factors in Computing Systems (CHI 2019)*
- C.24 Explaining Models: An Empirical Study of How Explanations Impact Fairness Judgment  
Jonathan Dodge, **Q. Vera Liao**, Yunfeng Zhang, Rachel K.E. Bellamy, Casey Dugan  
*ACM Conference on Intelligent User Interfaces (IUI 2019)*  
**\* Outstanding Paper Award**
- C.23 Bootstrapping Conversational Agents with Weak Supervision  
Neil Mallinar, Abhishek Shah, Rajendra Ugrani, Ayush Gupta, Manikandan Gurusankar, Tin Kam Ho, **Q. Vera Liao**, Yunfeng Zhang, Rachel K.E. Bellamy, Robert Yates, Chris Desmarais, Blake McGregor  
*AAAI Conference on Innovative Applications of Artificial Intelligence (IAAI 2019)*
- C.22 FarmChat: A Conversational Agent to Answer Farmer Queries  
Mohit Jain, Pratyush Kumar, Ishita Bhansali, **Q. Vera Liao**, Khai Truong, Shwetak Patel  
*ACM Conference on Interactive, Mobile, Wearable, and Ubiquitous Computing (IMWUT)/UbiComp 2019*
- C.21 All Work and no Play? Conversations with a Question-and-Answer Chatbot in the Wild  
**Q. Vera Liao**, Muhammed Mas-ud Hussain, Praveen Chandar, Matthew Davis, Marco Crasso, Dakuo Wang, Michael Muller, N. Sadat Shami, Werner Geyer  
*ACM Conference on Human Factors in Computing Systems (CHI 2018)*
- C.20 Face Value? Exploring the Effects of Embodiment for a Group Facilitation Agent  
Amenah Shamekhi, **Q. Vera Liao**, Dakuo Wang, Rachel Bellamy, Thomas Erickson  
*ACM Conference on Human Factors in Computing Systems (CHI 2018)*

- C.19 Towards an Optimal Dialog Strategy for Information Retrieval using Open- and Close-ended Questions  
Yunfeng Zhang, **Q. Vera Liao**, Biplav Srivastava  
*ACM Conference on Intelligent User Interfaces (IUI 2018)*
- C.18 Leveraging Conversational Agent to Assist New Hires during Onboarding  
Praveen Chandar, Yasaman Khazaeni, Matthew Davis, Michael Muller, Marco Crasso, **Q. Vera Liao**, N. Sadat Shami, Werner Geyer  
*International Conference on Human-Computer Interaction (INTERACT 2017)*
- C.17 Improvising Harmony: Opportunities for Technologies to Support Crowd Orchestration  
**Q. Vera Liao**, Victoria Bellotti, Michael Youngblood  
*ACM Conference on Supporting Group Work (GROUP 2016)*
- C.16 What Can You Do? Studying Social-Agent Orientation and Agent Proactive Interactions with an Agent for Employees  
**Q. Vera Liao**, Matthew Davis, Werner Geyer, Michael Muller, N. Sadat Shami  
*ACM Conference on Designing for Interactive Systems (DIS 2016)*
- C.15 #Snowden: Understanding Biases Introduced by Behavioral Differences of Opinion Groups on Social Media  
**Q. Vera Liao**, Wai-Tat Fu, Markus Strohmaier  
*ACM Conference on Human Factors in Computing Systems (CHI 2016)*
- C.14 It is All About Perspective: An Exploration of Mitigating Selective Exposure with Aspect Indicators  
**Q. Vera Liao**, Wai-Tat Fu, Sri Shilpa Mamidi  
*ACM Conference on Human Factors in Computing Systems (CHI 2015)*
- C.13 Expert Voices in Echo Chambers: Effects of Source Expertise Indicators on Exposure to Diverse Opinions  
**Q. Vera Liao**, Wai-Tat Fu  
*ACM Conference on Human Factors in Computing Systems (CHI 2014)*  
**\* Best Paper Award Honorable Mention**
- C.12 Can You Hear Me Now? Mitigating the Echo Chamber Effect by Source Position Indicators  
**Q. Vera Liao**, Wai-Tat Fu  
*ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2014)*
- C.11 Aggregating Personal Health Messages for Scalable Comparative Effectiveness Research  
Jason Cho, **Q. Vera Liao**, Yunliang Jiang, Bruce Schatz  
*ACM Conference on Bioinformatics, Computational Biology and Biomedical Informatics (BCB 2013)*
- C.10 Beyond the Filter Bubble: Interactive Effects of Perceived Threat and Topic Involvement on Selective Exposure to Information  
**Q. Vera Liao**, Wai-Tat Fu  
*ACM Conference on Human Factors in Computing Systems (CHI 2013)*
- C.9 Understanding Experts' and Novices' Expertise Judgment of Twitter Users  
**Q. Vera Liao**, Claudia Wagner, Peter Pirolli, Wai-Tat Fu  
*ACM Conference on Human Factors in Computing Systems (CHI 2012)*
- C.8 An ACT-R Model of Credibility Judgment of Micro-blogging Web Pages  
**Q. Vera Liao**, Peter Pirolli, Wai-Tat Fu  
*International Conference on Cognitive Modeling (ICCM 2012)*
- C.7 Designing and Evaluating a Clustering System for Organizing and Integrating Patient Drug Outcomes in Personal Health Messages  
Yunliang Jiang, **Q. Vera Liao**, Qian Cheng, Richard Berlin, Bruce Schatz  
*Annual Symposium of the American Medical Informatics Association (AMIA 2012)*

- C.6 It's Not in Their Tweets: Modeling Topical Expertise of Twitter Users  
Claudia Wagner, **Vera Liao**, Peter Pirolli, Les Nelson, Markus Strohmaier  
*ASE/IEEE International Conference on Social Computing (SocialCom 2012)*
- C.5 Information and Attitude Diffusion in Networks  
Wai-Tat Fu, **Q. Vera Liao**  
*International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction (SBP 2012)*
- C.4 Effects of Aging and Individual Differences on Credibility Judgments of Online Health Information  
**Q. Vera Liao**, Wai-Tat Fu  
*Annual Conference of the Cognitive Science Society (CogSci 2011)*
- C.3 Medtable™ An EMR-Based Tool to Support Collaborative Planning for Medication Use  
**Vera Liao**, Chieh-Li Chin, Stacey McKeever, Daniel Morrow, Katherine Davis, Elizabeth Wilson, Darren Kaiser, Michael Wolf, Thembi Conner-Garcia, James Graumlich  
*Human Factors and Ergonomics Society Annual Meeting 2011 (HFES 2011)*
- C.2 Crowdsourcing Quality Control of Online Information: a Quality-based Cascade Model  
Wai-Tat Fu, **Q. Vera Liao**  
*International Conference on Social Computing, Behavioral-Cultural Modeling and Prediction (SBP 2011)*
- C.1 Requirements of Transport Information Service and Route Guidance Service for Older Adults  
Jia Zhou, Pei-Luen Patrick Rau, Qin Gao, **Qingzi Liao**  
*World Congress on Ergonomics (IEA 2009)*

#### Journal Articles

- J.7 Why or Why Not? The Effect of Justification Styles on Chatbot Recommendations  
Darcia Wilkinson, Öznur Alkan, **Q. Vera Liao**, Massimiliano Mattetti, Inge Vejsbjerg, Bart P.Knijnenburg, Elizabeth Daly  
*To appear in ACM Transactions on Information Systems (TOIS)*
- J.6 AI Explainability 360: An Extensive Toolkit for Understanding Data and Machine Learning Models  
Vijay Arya, Rachel KE Bellamy, Pin-Yu Chen, Amit Dhurandhar, Michael Hind, Samuel C Hoffman, Stephanie Houde, **Q. Vera Liao**, et al.  
*Journal of Machine Learning Research*
- J.5 Tell Me About Yourself: Using an AI-Powered Chatbot to Conduct Conversational Surveys  
Ziang Xiao, Michelle X Zhou, **Q. Vera Liao**, Gloria Mark, Changyan Chi, Wenxi Chen, Huahai Yang  
*TOCHI Journal: ACM Transactions on Computer-Human Interaction*
- J.4 What's in it for me? Self-serving versus Other-oriented Framing in Messages Advocating Use of Prosocial Peer-to-peer services  
**Q. Vera Liao**, Rajan Vaish (co-first author), Victoria Bellotti  
*International Journal of Human-Computer Studies*
- J.3 Age Differences in Credibility Judgment of Online Health Information  
**Q. Vera Liao**, Wai-Tat Fu  
*ACM Transactions on Computer-Human Interaction (TOCHI)*
- J.2 An EMR-based Tool to Support Collaborative Planning for Medication Use Among Adults with Diabetes: Design of a Multi-Site Randomized Control Trial  
Daniel G. Morrow, Thembi Conner-Garcia, James F. Graumlich, Michael S. Wolf, Stacey McKeever, Anna Madison, Kathryn Davis, Elizabeth A.H. Wilson, **Vera Liao**, et al.  
*Contemporary Clinical Trials 33 (2012), 1023-1032*
- J.1 Factors Influencing Mobile Advertising Avoidance  
Pei-Luen Patrick Rau, **Qingzi Liao**, Cuiling Chen  
*International Journal of Mobile Communication 11, 2(2013), 123-139*



## Book Chapters

- B.5 Human-Centered Explainable AI: From Algorithms to User Experiences  
**Q. Vera Liao**, Kush R. Varshney  
*To appear in Fiebrink. (2023). Human-Centered Machine Learning (Cambridge University Press)*
- B.4 Conversational Interfaces for Information Search  
**Q. Vera Liao**, Werner Geyer, Michael Muller, Yasaman Khazaeni  
*In Oostendorp and Fu. (2020). Springer Human-Computer Interaction Series: Understanding and Improving Information Search*
- B.3 The Central Role of Cognitive Computations in Human-Information Interaction  
Wai-Tat Fu, Jessie Chin, **Q. Vera Liao**  
*In Oulasvirta et al. (2018). Computational Interaction*
- B.2 Emerging Media to Promote Physical Activity: Understanding Exposure, Attention and Behavior Change from Psychological and Computational Perspectives  
Dolores Albarracin, **Vera Liao**, Jessica Yi, Chengxiang Zhai  
*In Zhu, W. (2016) Sedentary Behavior and Health: Concepts, Assessment and Intervention*
- B.1 Interactive Skills and Dual Learning Processes  
Wai-Tat Fu, Jessie Chin, Wei Dong, **Q. Vera Liao**  
*In Seel, N. M. (2012). Encyclopedia of the Sciences of Learning*

## Demo

- D.3 Doc2Bot: A Document Grounded Bot Framework  
Kshitij Fadnis, Pankaj Dhoolia, Li Zhu, **Q Vera Liao**, Steven Ross, Nathaniel Mills, Sachindra Joshi, Luis Lastras  
*AAAI Conference on Artificial Intelligence (AAAI 2021)*
- D.2 Agent Assist through Conversation Analysis  
Kshitij Fadnis, Nathaniel Mills, Jatin Ganhotra, Haggai Roitman, Gaurav Pandey, Doron Cohen, Yosi Mass, Shai Erera, Chulaka Gunasekara, Danish Contractor, Siva Patel, Q Vera Liao, Sachindra Joshi, Luis Lastras, David Konopnicki  
*Conference on Empirical Methods in Natural Language Processing (EMNLP 2020)*
- D.1 Doc2Dial: a Framework for Dialogue Composition Grounded in Documents  
Song Feng, Kshitij Fadnis, **Q. Vera Liao**, Luis A. Lastras  
*AAAI Conference on Artificial Intelligence (AAAI 2020)*

## Workshop Papers

- W.12 Rethinking Model Evaluation as Narrowing the Socio-Technical Gap  
**Q. Vera Liao**, Ziang Xiao  
*ICML 2023 Workshop on AI+HCI*  
**\* Best Paper Award Honorable Mention**
- W.11 Microbanking: Bringing Credit to Low-wage Communities by Enhancing Informal Financial Practices with AI  
Heloisa Candello, Andrea Britto Mattos Lima, **Q. Vera Liao**, Claudio Pinhanez, Rogerio Abreu De Paula, Marcelo Carpinette Grave  
*CHI 2021 Workshop on Artificially Intelligent Technology for the Margins*
- W.10 A Multistakeholder Approach Towards Evaluating AI Transparency Mechanisms  
Ana Lucic, Madhulika Srikumar, Umang Bhatt, Alice Xiang, Ankur Taly, Q. Vera Liao, Maarten de Rijke  
*CHI 2021 Workshop on Operationalizing Human Centered Perspectives in Explainable AI*
- W.9 Active Learning++: Incorporating Annotator's Rationale using Local Model Explanation

- Bhavya Ghai, **Q. Vera Liao**, Yunfeng Zhang, Klaus Mueller  
*KDD 2020 Workshop on Data Science with Human in the Loop*
- W.8 Measuring Social Biases of CrowdWorkers using Counterfactual Queries  
Bhavya Ghai, **Q. Vera Liao**, Yunfeng Zhang, Rachel Bellamy, Klaus Mueller  
*CHI 2020 Workshop on Fair and Responsible AI*
- W.7 Business (mis)Use Cases of Generative AI  
Stephanie Houde, **Q. Vera Liao**, Jacquelyn Martino, Michael Muller, David Piorkowski, John Richards, Justin Weisz, Yunfeng Zhang  
*IUI 2020 Workshop on Human-AI Co-Creation with Generative Models*
- W.6 Doc2Dial: a Framework for Dialogue Composition Grounded in Business Documents  
Song Feng, Kshitij Fadnis, **Q. Vera Liao**, Luis A. Lastras  
*NeurIPS 2019 Workshop on Document Intelligence*
- W. 5 Human-AI Collaboration: Towards Socially Guided Machine Learning  
**Q. Vera Liao**, Rachel K.E. Bellamy, Michael Muller, Heloisa Candello  
*CHI 2019 Workshop on Human-Centered Machine Learning Perspectives*
- W.4 Lessons from Designing and Studying a Conversational Agent for Group Facilitation  
**Vera Liao**, Ameneh Shamekhi, Dakuo Wang  
*CHI 2018 Workshop on Voice-based Conversational UX Studies and Design*
- W.3 Tailoring Conversational UX through the Lens of Dialogue Complexity  
**Q. Vera Liao**, Biplav Srivastava, Pavan Kapanipathi  
*CHI 2017 Workshop on Conversational UX Design*
- W.2 Human-Agent Collaborations in Meetings  
Dakuo Wang, **Q. Vera Liao**, Rachel K.E. Bellamy, Thomas D. Erickson, Jason B. Ellis, Yunfeng Zhang, Bin Xu, Michael Muller  
*CSCW 2017 Workshop on Robots in Groups and Teams*
- W.1 Effects of Cognitive Aging on Consumption of Online Health Information  
**Q. Vera Liao**, Jessie Chin, Wai-Tat Fu  
*CHI 2010 Workshop on Senior-friendly Technologies: Interaction Design for the Elderly*

#### Conference Posters and Non-Archived Papers

- P.7 Supporting Qualitative Analysis with Large Language Models: Combining Codebook with GPT-3 for Deductive Coding  
Ziang Xiao, Xingdi Yuan, **Q. Vera Liao**, Rania Abdelghani, Pierre-Yves Oudeyer  
Human-Computer Interaction Consortium (HCIC 2018)
- P.6 Ways of Knowing for AI: (Chat)bots as Interfaces for Machine Learning  
**Q. Vera Liao**, Michael Muller  
Human-Computer Interaction Consortium (HCIC 2018)
- P.5 Exploring AI Values and Ethics through Participatory Design Fictions  
Michael Muller, **Q. Vera Liao**  
Human-Computer Interaction Consortium (HCIC 2017)
- P.4 Seeking Information like Mr. Spock: Applying Persuasion Theories to the Design of Information Systems  
**Q. Vera Liao**  
Human-Computer Interaction Consortium (HCIC 2015)
- P.3 The Impact of User Reviews on Older and Younger Adults' Attitudes towards Online Medical Information  
**Q. Vera Liao**, Wai-Tat Fu  
*33rd Annual Conference of the Cognitive Science Society (CogSci 2011)*



- P.2 How User Reviews influence Younger and Older Adults Credibility Judgments of Online Health Information  
**Q. Vera Liao**, Wai-Tat Fu  
*Extended Abstract of 29<sup>th</sup> ACM Conference on Human Factors in Computing Systems (CHI EA 2011)*  
**\* Student Research Competition 3rd Place**
- P.1 Effects of Cognitive Aging on Credibility Assessment of Online Health Information  
**Q. Vera Liao**, Wai-Tat Fu  
*Extended Abstract of 28<sup>th</sup> ACM Conference on Human Factors in Computing Systems (CHI EA 2010)*

### Working Papers

- WP.13 "I'm Not Sure, But...": Examining the Impact of LLM's Uncertainty Expression on User Reliance and Trust  
 Sunnie Kim, Jennifer Wortman Vaughan, **Q Vera Liao**, Mihaela Vorvoreanu, Steph Bellard
- WP.12 "Because I did most of the work": Seeing Authenticity in Creative Writing with LLM  
 Angel Hsing-Chi Hwang, **Q Vera Liao**, Su Lin Blodgett, Alexandra Oltaunu, Adam Trischler
- WP.11 Canvil: Supporting Designers to Adapt LLMs as Design Materials  
 Kevin Feng, **Q Vera Liao**, Ziang Xiao, Jennifer Wortman Vaughan
- WP.10 Generative Echo Chamber? Effect of LLM-Powered Search Systems on Information Seeking  
 Nikhil Sharma, **Q Vera Liao**, Ziang Xiao
- WP.9 AI Transparency in the Age of LLMs: A Human-Centered Research Roadmap  
**Q Vera Liao**, Jennifer Wortman Vaughan
- WP.8 Why is AI not a Panacea for Data Workers? An Interview Study on Human-AI Collaboration in Data Storytelling  
 Haotian Li, Yun Wang, **Q Vera Liao**, Huamin Qu
- WP.7 Generation Probabilities Are Not Enough: Exploring the Effectiveness of Uncertainty Highlighting in AI-Powered Code Completions  
 Helena Vasconcelos, Gagan Bansal, Adam Fourney, **Q Vera Liao**, Jennifer Wortman Vaughan
- WP.6 Uncertainty Quantification 360: A Holistic Toolkit for Quantifying and Communicating the Uncertainty of AI  
 Soumya Ghosh, **Q. Vera Liao**, Karthikeyan Natesan Ramamurthy, Jiri Navratil, Prasanna Sattigeri, Kush R Varshney, Yunfeng Zhang
- WP.4 Question-Driven Design Process for Explainable AI User Experiences  
**Q. Vera Liao**, Milena Pribić, Jaesik Han, Sarah Miller, Daby Sow
- WP.3 How Much Automation Does a Data Scientist Want?  
 Dakuo Wang, **Q. Vera Liao**, Yunfeng Zhang, Udayan Khurana, Horst Samulowitz, Soya Park, Michael Muller, Lisa Amini
- WP.2 Enabling Value Sensitive AI Systems through Participatory Design Fictions  
**Q Vera Liao**, Michael Muller
- WP.1 One Explanation Does Not Fit All: A Toolkit and Taxonomy of AI Explainability Techniques  
 Vijay Arya, Rachel KE Bellamy, Pin-Yu Chen, Amit Dhurandhar, Michael Hind, Samuel C Hoffman, Stephanie Houde, **Q Vera Liao**, Ronny Luss, Aleksandra Mojsilović, Sami Mourad, Pablo Pedemonte, Ramya Raghavendra, John Richards, Prasanna Sattigeri, Karthikeyan Shanmugam, Moninder Singh, Kush R Varshney, Dennis Wei, Yunfeng Zhang

### [Patents]

- PA.11 Precise chatbot-training system (filed)  
**Qingzi Liao**, Biprav Srivastava, Yunfeng Zhang, Rachel Katherine Emma Bellamy
- PA.10 Conversational agent counterfactual simulation (filled)  
**Vera Liao**, Yunfeng Zhang, Stephanie Houde

- PA.9 Providing ai explanations based on task context (filled) 2023  
**Vera Liao**, Yunfeng Zhang, Jorge Andres Moros Ortiz, Amit Dhurandhar, Ronny Luss
- PA.8 Increasing trust formation and reduce oversight costs for autonomous agents 2023  
 John Thomas Richards, David John Pirokowski, Stephanie Houde, Yunfeng Zhang, **Qingzi Liao**, Rachel Katherine Emma Ballamy
- PA.7 Integrating multiple domain problem solving in a dialog system for a user 2022  
 Adi I. Botea, Oznur Alkan, Elizabeth Daly, Matthew Davis, Akihiro Kishimoto, **Vera Liao**, Radu Marinescu, Biplav Srivastava, Kartik Talamadupula, Yunfeng Zhang
- PA.6 Using a dialog system for integrating multiple domain learning and problem solving 2022  
 Akihiro Kishimoto, Oznur Alkan, Adi Botea, Elizabeth Daly, Matthew Davis, **Vera Liao**, Radu Marinescu, Biplav Srivastava, Kartik Talamadupula, Yunfeng Zhang
- PA.5 Adapting dialog models by relevance value for concepts to complete a task 2022  
 Song Feng, **Qingzi Liao**, Luis A. Lastras-Montano, Robert G. Farrell, Ana Smith
- PA.4 Agent to bot transfer 2022  
 John Thomas Richards, Rachel KE Bellamy, Robert G. Farrell, **Qingzi Liao**, and David John Piorkowski
- PA.3 Generating and executing an optimal dialogue strategy 2021  
 Yunfeng Zhang, **Vera Liao**, and Biplav Srivastava.
- PA.2 Building domain models from dialog interactions 2021  
 Oznur Alkan, Rachel KE Bellamy, Elizabeth Daly, Matthew Davis, **Vera Liao**, and Biplav Srivastava
- PA.1 Assessing complexity of dialogs to streamline handling of service requests 2018  
 Biplav Srivastava, **Qingzi Vera Liao**, and Pavan Kapanipathi Bangalore

- [Invited Talks]** **Human-Centered AI Transparency: Lessons Learned and Open Questions for LLMs** 2023  
 Keynote @ Computational Interaction Summer School 2023  
 Keynote @ ICML 2023 Workshop on AI+HCI  
 Invited talk @ Department of Computer Science, Brown University  
 Distinguished Lecture Series @ Department of Computer Science, JHU  
 Distinguished Speaker Series @ University of Chicago DSI
- Towards Human-Compatible Explainable AI** 2023-2024  
 Invited talk @ CVPR 2023 Workshop on Explainable AI  
 Keynote @ ACM ICAIF Workshop on Explainable AI in Finance  
 (upcoming) NIST AI Metrology Colloquium Series  
 (upcoming) UK AI Safety Institute
- AI Explainability and Transparency** 2023  
 Guest speaker on The Gradient: Perspectives on AI Podcast
- Moving from Algorithms to Explainable ML UX** 2023  
 Guest speaker on Experiencing Data Podcast
- Human-Centered Explainable AI: From Algorithms to User Experiences** 2021-2023  
 MIT CSAIL HCI Seminar  
 Stanford HCI Seminar  
 NEC Lab  
 Distinguished Lecture Series @ Department of Computer Science, University of Toronto  
 Responsible Data Science and AI Speaker Series @ UIUC iSchool  
 Princeton HCI conversation  
 Keynote @ IJCAI 2022 Workshop on Explainable AI  
 Keynote @ CVPR 2022 workshop on Human-centered Intelligent Services Safety and Trustworthy

Responsible AI Seminar @ Nokia Bell Labs  
 Keynote@ Mobilit.AI  
 UC Santa Cruz Ethics and Activism Guest Lecture  
 AI Seminar @ University of Michigan CSE  
 HCI @ KAIST  
 GVU Brown Bag at Georgia Tech  
 Keynote @ VIS 2021 Workshop on Trust and Expertise in Visual Analytics

**From trustworthy AI to appropriate trust: lessons from human-centered explainable AI** 2022  
 Invited talk @ KDD 2022 Trustworthy AI Day

**AI and Worker Wellbeing: A Responsible AI Perspective** 2022  
 CHI Work Symposium

**Introduction to Explainable AI** 2021  
 Tutorial @ CHI 2021  
 Research Seminar @ 3M

**Questioning the AI: Towards Human Centered Explainable AI** 2020, 2021  
 Research Seminar @ 3M  
 Software Engineering for Machine Learning Application Symposium (SEMLA2021)  
 Academic Fringe Festival at TU Delft  
 Human-AI Interaction Summer School Guest Lecture at University of Toronto  
 Applied & Interactive Machine Learning Guest Lecture at UCLA  
 Tsinghua University Students Forum  
 Human-AI Interaction Guest Lecture at University of Texas at Austin  
 Department of Computer Science and Engineering, New York University  
 J.P Morgan AI Research  
 Spotify Research  
 Workshop on Interpretable Machine Learning& Causal Inference, Royal Statistical Society

**Conversational Interfaces for Information Search** 2020  
 Keynote, 4<sup>th</sup> International Workshop on Chatbot Research (Conversations 2020)

**Towards Adaptive Conversational Agents** 2018  
 University of California, Merced

**Understanding and Designing for Information Behavior Nudging** 2016  
 School of Informatics and Computing, Indiana University Bloomington  
 School of Library and Information Science, University of North Carolina at Chapel Hill  
 Department of Computer Science & Engineering, Washington University in St. Louis  
 School of Computing, Clemson University  
 IBM T.J. Watson Research Center

**Breaking Out the Echo Chambers: Designing for Cross-Ideology Discussions Online** 2013  
 Computational Social Science Seminar, GESIS- Leibniz Institute for the Social Science (Cologne)

**Bursting the Filter Bubbles: Understanding and Designing for Seeking Diverse Opinion** 2013  
 TIMAN (text information management and analysis) Research Forum, UIUC

**Age Differences in Credibility Judgment of Online Health Information** 2013  
 CSTL (cognitive science of teaching and learning) Seminar, UIUC

[Invited Panels] **Panel on LLMs and the Infrastructure of CSCW** 2023  
 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW2023)

**Panel on Human-Computer Cooperation in Data Science** 2021  
 KDD 2021 Workshop on Data Science with Human in the Loop

	<b>Panel on Explainable AI in Industry</b>	2021
	AAAI 2021 Workshop on Explainable Agency in Artificial Intelligence	
	<b>Panel on Interaction Modalities with AI</b>	2018
	Human-Computer Interaction Consortium (HCIC 2018)	
[Teaching]	(upcoming) <b>EMNLP 2024 Tutorial on Human-Centered Evaluation of Language Tech</b>	2024
	<b>CHI 2023 Tutorial on HCI and AI</b>	2023
	<b>NeurIPS 2022 Tutorial on Algorithmic Fairness at the Intersection</b>	2022
	<b>NAACL 2022 Tutorial on Human-Centered Evaluation of Explanation</b>	2022
	<b>CHI 2021 Tutorial on Intro to Explainable AI</b>	2021
	<b>CS 465: User Interface Design, <i>Teaching Assistant</i></b>	2013, 2014, 2015
	<b>Psych 358: Human Factors, <i>Lab Instructor</i></b>	2011
[Mentoring]	Angel Hwang (Intern, PhD student at Cornell University)	2023
	Sunnie S.Y. Kim (Intern, PhD student at Princeton University)	2023
	Kevin Feng (Intern, PhD student at University of Washington)	2023
	Ekaterina Svikhnushina (Thesis committee, PhD student at EPFL)	2023
	Kalpani Anuradha Welivita (Thesis committee, PhD student at EPFL)	2023
	Qingxiao Zheng (Thesis committee, PhD student at UIUC)	2023-present
	Chacha Chen (Thesis committee, PhD student at University of Chicago)	2023
	Shalaleh Rismani (Mentee through MSR & Mila Research Grant)	2023
	Anna Kawakami (Intern, PhD student at Carnegie Mellon University)	2022
	Valerie Chen (Intern, PhD student at Carnegie Mellon University)	2022
	Helena Vasconcelos (Intern, Undergraduate student at Stanford University)	2022
	Vivian Lai (Thesis committee, PhD student at University Colorado Boulder)	2021-2022
	Vikram Mohanty (Thesis committee, PhD student at Virginia Tech)	2021-2023
	Qiaosi Wang (Thesis committee, PhD student at Georgia Tech)	2021-present
	Jiao Sun (Intern, PhD student at University of Southern California)	2021
	Upol Ehsan (Intern, Thesis Committee, PhD student at Georgia Institute of Technology)	2020, 2022
	Soya Park (Intern, PhD student at MIT)	2020
	Shweta Narkar (Intern, PhD student at Rensselaer Polytechnic Institute)	2020
	Xianyou Yang (Thesis committee, M.S student at Rochester Institute of Technology)	2020
	Bhavya Ghai (Intern, Thesis committee, PhD student at Stony Brook University)	2019
	Daricia Wilkinson (Intern, PhD student at Clemson University)	2019
	Ana Smith (Intern, PhD student at Cornell University)	2019
	Jonathan Dodge (Intern, PhD student at Oregon State University)	2018
	Ameneh Shamekhi (Intern, Thesis committee, PhD student at Northeastern)	2017
	Tingting Gao (UIUC undergraduate)	2015
	Shreya Rao (UIUC undergraduate)	2015
	Jing Huang (UIUC undergraduate)	2015
	Oskar Zhang (UIUC undergraduate)	2015
	Sri Shilpa Mamidi (UIUC undergraduate)	2014
	Mingzhu Nie (UIUC undergraduate)	2013
	Neil Nijhawan (UIUC undergraduate)	2013

## [Services]

### **Grant Review**

NSF Information and Intelligent Systems Division review panel (2021-2024)  
Natural Sciences and Engineering Research Council of Canada (2023)

### **Chairing/Editor**

Co-Editor-in-Chief, Springer Human-Computer Interaction Book Series (2021-present)  
Editor, ACM CSCW (2021-present)  
Program Chair, ACM IUI (2025)  
Sub-Committee Chair, “Understanding People: Quantitative” Sub-Committee of CHI (2023)  
Area Chair, ACM FAccT (2023, 2024)  
Chair, IBM Research Professional Interest Community of HCI (2018-2021)

### **Organizing Committee**

KDD AI for Open Society Day (KDD2023)  
CHI Workshop on Generative AI and HCI (CHI2023)  
CHI Special Interest Group on Human-Centered Responsible AI (CHI2023)  
NeurIPS Workshop on Human-Centered AI (NeurIPS 2022)  
CHI Panel on Responsible Language Technologies: Foreseeing and Mitigating Harms (CHI2022)  
CHI Workshop on Human-Centered Explainable AI (CHI 2021, CHI2022)  
CSCW Panel on Human-Agent Communication: Connecting HCI and AI (CSCW 2019)  
ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2021)  
ACM Conference on Interactive Media Experiences (IMX 2021)  
CHI Workshop on Conversational Agents for Health and Wellbeing (CHI 2020)  
IUI Workshop on User-Aware Conversational Agent (USER2AGENT 2019, 2020)  
ACM Conference on Intelligent User Interface (IUI 2019)  
IEEE International Conference on Healthcare Informatics 2016 (ICHI 2016)  
ICHI 2015 Workshop on Health Information Quality (HealthIQ 2015)

### **Editorial Board**

Associate Editor for ACM Transactions on Interactive Intelligent Systems (TiiS) (2019-present)  
Associate Editor for International Journal of Human-Computer Studies (2019-2021)  
Guest Editor for ACM TiiS Special Issue on Human-Centered Explainable AI (2021-2022)  
Guest Editor for ACM TiiS Special Issue on Conversational Agents for Healthcare and Wellbeing (2020-2021)

### **Senior Program Committee**

ACM Conference on Intelligent User Interface– Senior Program Committee (IUI2022)  
ACM Conference on Human Factors in Computing Systems – Associate Chair (CHI 2018, CHI 2019, CHI 2020, CHI 2021, CHI2022)  
ACM Conference on Computer Supported Cooperative Work and Social Computing – Associate Chair (CSCW 2018)

### **Program Committee**

ACM Conference on Fairness, Accountability, and Transparency (FAccT 2021)  
KDD 2020 Workshop on Data Science with Human in the Loop (DaSH 2020)  
ACM International Conference on Supporting Group Work (GROUP 2020)  
European Conference on Computer-Supported Cooperative Work (ECSCW 2019)  
AAAI Conference on Artificial Intelligence (AAAI 2018)  
ACM Conference on Intelligent User Interface (IUI 2016, IUI 2017, IUI 2018, IUI 2019)  
International Joint Conference on Artificial Intelligence (IJCAI 2017, IJCAI 2018)  
ACM Conference on Human Factors in Computing Systems – Associate Chair for Late-Breaking Work category (CHI 2016)  
International Conference on Social Informatics (SocInfo 2016, SocInfo 2017)  
IEEE Human Computing and Social Computing Symposium (HCSC 2016, 2017)  
IEEE International Conference on Healthcare Informatics 2015 (ICHI 2015)  
ACM Conference on Hypertext and Social Media (Hypertext 2015)  
ACM WebSci 2014 Workshop on Computational Approach to Social Modeling