

CURRICULUM VITAE

Heng Zheng

School of Information Sciences

University of Illinois Urbana-Champaign, Champaign, IL

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[LinkedIn](#), [Google Scholar](#), [ORCID](#)

Academic Appointments

- 2024-08 – present Postdoctoral Research Associate, University of Illinois Urbana-Champaign
Supervisor: Jodi Schneider, Bertram Ludäscher
Funded by the UIUC iSchool Postdoctoral Research Associate Program and grants from the Institute of Museum and Library Services and the Alfred P. Sloan Foundation.
- 2024-02 – 2024-08 Postdoctoral Research Associate, University of Illinois Urbana-Champaign
Supervisor: Jodi Schneider
Funded by grants from the Institute of Museum and Library Services and the Alfred P. Sloan Foundation.
- 2023-01 – 2024-02 Research Associate, University of Illinois Urbana-Champaign
Supervisor: Jodi Schneider
Funded by grants from the Institute of Museum and Library Services and the Alfred P. Sloan Foundation.

Education

- 2024 Ph.D. in Artificial Intelligence, University of Groningen, The Netherlands
Dissertation Title: *Arguments, Cases and Their Hardness: A Formal Theory With Case Studies in AI and Law*.
Supervisors: Bart Verheij and Davide Grossi
- 2018 Master of Logic, Sun Yat-sen University, China
Supervisors: Minghui Xiong and Bart Verheij
- 2016 Bachelor of Information Management and Information Systems, Dalian Maritime University, China

Publications

Peer-reviewed conference publications

- 2024 **Heng Zheng**, Y. Fu, M. J. Sarol, I. Sarraf, and J. Schneider. “Addressing Unreliability Propagation in Scientific Digital Libraries”. In: *The 2024 ACM/IEEE Joint Conference on Digital Libraries (JCDL '24)*. ACM, New York, 2024. DOI: [10.1145/3677389.3702526](https://doi.org/10.1145/3677389.3702526)

- 2024 **H. Zheng***, T. D. Ledford, and J. Schneider. “Arguing About Controversial Science in the News: Does Epistemic Uncertainty Contribute to Information Disorder?” In: *Wisdom, Well-Being, Win-Win. iConference 2024*. Ed. by I. Sserwanga, H. Joho, J. Ma, P. Hansen, D. Wu, M. Koizumi, and A. J. Gilliland. Lecture Notes in Computer Science. Cham: Springer Nature Switzerland, 2024, pp. 211–235. DOI: [10.1007/978-3-031-57860-1_16](https://doi.org/10.1007/978-3-031-57860-1_16)
- 2023 J. Schneider, J. Lee, **H. Zheng**, and M. O. Salami. “Assessing the Agreement in Retraction Indexing across 4 Multidisciplinary Sources: Crossref, Retraction Watch, Scopus, and Web of Science”. In: *27th International Conference on Science, Technology and Innovation Indicators (STI 2023)*. 2023. DOI: [10.55835/6441e5cae04dbe5586d06a5f](https://doi.org/10.55835/6441e5cae04dbe5586d06a5f)
- 2021 **H. Zheng***, D. Grossi, and B. Verheij. “Hardness of Case-Based Decisions: a Formal Theory”. In: *Proceedings of the Eighteenth International Conference on Artificial Intelligence and Law*. ACM, New York, 2021, pp. 149–158. DOI: [10.1145/3462757.3466071](https://doi.org/10.1145/3462757.3466071)
- 2020 **H. Zheng***, D. Grossi, and B. Verheij. “Precedent Comparison in the Precedent Model Formalism: A Technical Note”. In: *Legal Knowledge and Information Systems. Proceedings of JURIX 2020: The Thirty-third Annual Conference*. Ed. by S. Villata, J. Harašta, and P. Kšemen. Vol. 334. Amsterdam: IOS Press, 2020, pp. 259–262. DOI: [10.3233/FAIA200878](https://doi.org/10.3233/FAIA200878)
- 2020 **H. Zheng***, D. Grossi, and B. Verheij. “Case-Based Reasoning with Precedent Models: Preliminary Report”. In: *Computational Models of Argument. Proceedings of COMMA 2020*. Ed. by H. Prakken, S. Bistarelli, F. Santini, and C. Taticchi. Vol. 326. Amsterdam: IOS Press, 2020, pp. 443–450. DOI: [10.3233/FAIA200528](https://doi.org/10.3233/FAIA200528)
- 2018 **H. Zheng***, M. Xiong, and B. Verheij. “Checking the Validity of Rule-Based Arguments Grounded in Cases: A Computational Approach”. In: *Legal Knowledge and Information Systems. JURIX 2018: The Thirty-first Annual Conference*. Ed. by M. Palmirani. Vol. 313. Amsterdam: IOS Press, 2018, pp. 220–224. DOI: [10.3233/978-1-61499-935-5-220](https://doi.org/10.3233/978-1-61499-935-5-220)

Peer-reviewed workshop papers

- 2023 A.-S. Lippolis, A. Klironomos, D. F. Milon-Flores, **H. Zheng**, A. Jouglar, E. Norouzi, and A. Hogan. “Enhancing Entity Alignment Between Wikidata and ArtGraph Using LLMs”. In: *Semantic Web and Ontology Design for Cultural Heritage 2023 (SWODCH 2023)*. Ed. by A. Bikakis, R. Ferrario, S. Jean, B. Markhoff, A. Mosca, and M. Nicolosi Asmundo. CEUR-WS.org, 2023. URL: <https://ceur-ws.org/Vol-3540/paper7.pdf>
- 2023 **H. Zheng*** and J. Schneider. “Can Argumentation Help Understand How Scientific Information Reaches the Public?” In: *Information Science Trends (IST) 2023: Information Science Perspectives on Documenting Processes and Practices*. Zenodo, 2023. DOI: [10.5281/zenodo.8023747](https://doi.org/10.5281/zenodo.8023747)

- 2021 **H. Zheng***, D. Grossi, and B. Verheij. “A Formal Approach to Case Comparison in Case-Based Reasoning: Research Abstract”. In: *The First International Workshop on Logics for New-Generation Artificial Intelligence (LNGAI 2021)*. Ed. by B. Liao, J. Luo, and L. van der Torre. London: College Publications, 2021, pp. 150–153. URL: <http://www.collegepublications.co.uk/LNGAI/?00001>
- 2021 **H. Zheng**, D. Grossi, and B. Verheij. “Logical Comparison of Cases”. In: *AI Approaches to the Complexity of Legal Systems XI-XII. AICOL AICOL XAILA 2020 2018 2020*. Ed. by V. Rodríguez-Doncel, M. Palmirani, M. Araszkiewicz, P. Casanovas, U. Pagallo, and G. Sartor. Lecture Notes in Computer Science. Cham: Springer, 2021, pp. 125–140. DOI: [10.1007/978-3-030-89811-3_9](https://doi.org/10.1007/978-3-030-89811-3_9)
- 2020 **H. Zheng***, D. Grossi, and B. Verheij. “Precedent Comparison in the Precedent Model Formalism: Theory and Application to Legal Cases”. In: *Proceedings of the EXplainable and Responsible AI in Law (XAILA) Workshop at JURIX 2020*. Ed. by G. J. Nalepa, M. Araszkiewicz, M. Atzmüller, B. Verheij, and S. Bobek. CEUR-WS, 2020. URL: https://ceur-ws.org/Vol-2891/XAILA-2020_paper_3.pdf

Other peer-reviewed publications

- 2021 **H. Zheng**. “Modeling Case-Based Reasoning with the Precedent Model Formalism: An Overview”. In: *Online Handbook of Argumentation for AI*. ed. by F. Castagna, F. Mosca, S. Mumford J. Sarkadi, and Á. Xydis. Vol. 2. arXiv, 2021, pp. 72–76. DOI: <https://doi.org/10.48550/arXiv.2106.10832>

Other publications

Conference Papers with Proceedings (Reviewed as Abstracts)

- 2024 **H. Zheng***, Y. Fu, and J. Schneider. *How Does a Piece of Unreliable Code Affect Its Citing Publications? An Argumentation Analysis*. The Thirteenth Conference of the Ontario Society for the Study of Argumentation, OSSA 13. URL: <https://jodischneider.com/pubs/ossa2024.pdf>

Poster

- 2024 Y. Fu, **H. Zheng**, E. Vandael, and J. Schneider. *Assessing the Impact of a Computational Chemistry Protocol*. Poster at the American Chemical Society 2024 Fall Meeting. URL: <https://hdl.handle.net/2142/124768>
- 2023 **H. Zheng***. *Using Argument Graphs to Audit Reasoning in Scientific Publications*. Poster at the International Semantic Web Research Summer School (ISWS 2023). 2023. URL: <https://hdl.handle.net/2142/118103>

Book chapter without peer review

- 2021 **H. Zheng** and B. Verheij. “Rules, Cases and Arguments in Artificial Intelligence and Law”. In: *Research Handbook on Big Data Law*. Ed. by R. Vogl. Cheltenham: Edgar Elgar Publishing, 2021, pp. 373–387. URL: <https://www.e-elgar.com/shop/gbp/research-handbook-on-big-data-law-9781788972819.html>

* Primary presenter

Projects & Funding

2018 – 2022 Overseas Study Program of Guangzhou Elite Project for Ph.D. study
Funded by The Guangzhou Elites Scholarship Council
Amount: ~\$88,000
Role: Ph.D. researcher

Service

Reviewer - Journals

- *Studies in Logic*

Reviewer - Conferences

- Workshop on AI, Law and Philosophy at the 36th International Conference on Legal Knowledge and Information Systems (ALP@JURIX 2023)
- Computational Models of Natural Argument (CMNA 2023, 2024)
- The Online Handbook of Argumentation for AI (OHAAI 2022, 2023)
- The International Open Benchmark Council (BenchCouncil) International Symposium on Intelligent Computers, Algorithms, and Applications, AI for Law Area (2023)

Additional Reviewer - Conferences

- The 3rd International Conference on Artificial Intelligence Logic and Applications (AILA 2023)
- The 27th International Conference on Science, Technology and Innovation Indicators (STI 2023)

Service for the School of Information Sciences, University of Illinois Urbana–Champaign

2024 AI Curriculum Committee

Award

2023 Best Team Award and Best Presentation Award at the International Semantic Web Summer School 2023

Teaching

School of Information Sciences, University of Illinois at Urbana-Champaign

Instructor of Record

Fall 2024 Information Modeling
MS in Information Management required course
School of Information Sciences, University of Illinois at Urbana-Champaign

Guest Lectures

2024-03-28 “Using Argumentation to Model Information”
Information Modeling (Instructor: Karen Wickett)
School of Information Sciences, University of Illinois at Urbana-Champaign
2023-11-13 “Argumentation for Information Modeling”
Information Modeling (Instructor: Bertram Ludäscher)
School of Information Sciences, University of Illinois at Urbana-Champaign

Department of Artificial Intelligence, University of Groningen, NL

Teaching Assistant

2019 Arguing Agents (MS in Artificial Intelligence course), University of Groningen, the Netherlands

Programming Languages

Prolog; Python; C; Java; SQL

Markup Languages

LaTeX

Languages

English (fluent); Mandarin (native); Cantonese (native); Dutch (intermediate)