Yuanxi "Rosa" Fu
Curriculum Vitae

University of Illinois Urbana-Champaign
School of Information Sciences
Room 5080, 614 E. Daniel Street, Champaign, IL

Email: fu5@illinois.edu
Web: https://yuanxifu.site/

RESEARCH AREAS

- Conceptual foundations in information science
- Scientific reasoning and argumentation
- Ethics of knowledge
- Data infrastructure

EDUCATION

University of Illinois at Urbana-Champaign, School of Information Sciences
Ph.D. Information Sciences — expected May 2027
M.S. Bioinformatics — 2021

University of Illinois at Urbana-Champaign, Department of Chemistry
Ph.D. Chemistry — 2015

Nanjing University, School of Chemistry and Chemical Engineering, China
B.S. Chemistry — 2008

SELECTED AWARDS AND HONORS

Eugene Garfield Doctoral Dissertation Fellowship, Beta Phi Mu International Honor Society — 2025
Journal of the Association for Information Science and Technology (JASIST) top reviewers — 2021
Pan Xueping's scholarship, Nanjing University (awarded the top-ranked student in each major cohort) — 2008

IMMIGRATION STATUS

U.S. permanent resident

PUBLICATIONS (student mentees underlined, †senior author)

Peer reviewed journal papers

J6 **Fu, Y.**, Clarke, C. V., Moer, M. V., & Schneider, J. (2024). Exploring evidence selection with the inclusion network. *Quantitative Science Studies*, 5(1), 219-245. https://doi.org/10.1162/qss_a_00287

J5 Schneider, J., Woods, N. D., Proescholdt, R., & **the RISRS Team**. (2022). Reducing the inadvertent spread of retracted science: recommendations from the RISRS report. *Research Integrity and Peer Review*, 7(1), 6. https://doi.org/10.1186/s41073-022-00125-x

J4 **Fu, Y.**, & Dlott, D. D. (2015). Single molecules under high pressure. *The Journal of Physical Chemistry C*, 119(11), 6373–6381. https://doi.org/10.1021/jp512858u

J3 Brown, K. E., **Fu, Y.**, Shaw, W. L., & Dlott, D. D. (2012). Time-resolved emission of dye probes in a shock-compressed polymer. *Journal of Applied Physics*, 112(10), 103508. https://doi.org/10.1063/1.4765687

J2 **Fu, Y.,** Friedman, E. A., Brown, K. E., & Dlott, D. D. (2011). Vibrational spectroscopy of nitroaromatic self-assembled monolayers under extreme conditions. *Chemical Physics Letters*, 501(4), 369–374. https://doi.org/10.1016/j.cplett.2010.12.013

J1 Chen, W., Li, H., Huang, H., **Fu, Y.**, Zhang, H. L., Ma, J., & Wee, A. T. S. (2008). Two-dimensional pentacene:3,4,9,10-perylenetetracarboxylic dianhydride supramolecular chiral networks on Ag(111). *Journal of the American Chemical Society*, 130(37), 12285–12289. https://doi.org/10.1021/ja801577z

Peer Reviewed Conference Full paper

C2 Zheng, H.*, **Fu, Y**.*, Sarol, M. J., Sarraf, I., & Schneider, J. (2024). Addressing unreliability propagation in scientific digital libraries. *Proceedings of the 24th ACM/IEEE Joint Conference on Digital Libraries*, 1–11. https://doi.org/10.1145/3677389.3702526 (*equal contribution first author)

C1 **Fu, Y.**, & Schneider, J. (2020). Towards knowledge maintenance in scientific digital libraries with the keystone framework. *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries in 2020*, 217–226. https://doi.org/10.1145/3383583.3398514

Peer Reviewed Conference Short Paper

CS3 **Fu, Y.**, Yuan, J., & Schneider, J. (2021). Using citation bias to guide better sampling of scientific literature. *Proceedings of the 18th International Conference on Scientometrics & Informetrics*, 419–424. http://jodischneider.com/pubs/issi2021.pdf

CS2 Hsiao, T.K., **Fu, Y.**, & Schneider, J. (2020). Visualizing evidence-based disagreement over time: The landscape of a public health controversy 2002–2014. *Proceedings of the Association for Information Science and Technology*, 57(1), e315. https://doi.org/10.1002/pra2.315 (equal contribution first author)

CS1 **Fu, Y.**, Christensen, J. M., & Dlott, D. D. (2014). Molecular adsorbates under high pressure: A study using surface-enhanced Raman scattering spectroscopy. *Journal of Physics: Conference Series*, 500(12), 122004. https://doi.org/10.1088/1742-6596/500/12/122004

Peer Reviewed Workshop Papers

W4 Stade, C., Schneider, J., & **Fu, Y.**†(2025). From evidence to insights: GraphRAG as a dynamic knowledge layer for the collaboration for environmental evidence's database of evidence reviews. *Proceedings of the 3rd International Workshop on Knowledge Graphs for Sustainability (KG4S 2025)*, 4002, 39–45. https://ceur-ws.org/Vol-4002/short6.pdf

W3 **Fu, Y.**, & Schneider, J. (2025). Engineering the reproducible literature review section for scholarly publications and grant applications. *Proceedings of the AAAI Symposium Series*, 5(1), 360-364. https://doi.org/10.1609/aaaiss.v5i1.35612

W2 **Fu, Y.**, & Schneider, J. (2024). An argumentation interface to facilitate human-machine collaboration in scientific research: A preliminary exploration. *Proceedings of the 24th Workshop on Computational Models of Natural Argument*. The 24th Workshop on Computational Models of Natural Argument (CMNA'24), Hagen, Germany. https://ceur-ws.org/Vol-3769/paper4.pdf

W1 **Fu, Y.**, Schneider, J., & Blake, C. (2021). Finding keystone citations for constructing validity chains among research papers. *Companion Proceedings of the Web Conference 2021*, 451–455. (Sci-k 2021) https://doi.org/10.1145/3442442.3451368

TEACHING EXPERIENCE

Co-instructor: develop new course modules and homework assignments, teach class sessions, administrate Canvas

University of Illinois Urbana-Champaign, iSchool

- Concepts of Machine Learning — 2025 Spring
- Ethics and Policy for Data Science — 2024 Spring

Teaching assistant: grading, office hours, leading lab/discussion sessions, administrate Canvas

University of Illinois Urbana-Champaign, iSchool

- Data Management, Curation & Reproducibility — 2026 Fall
- Theory and Practice of Data Cleaning (Coursera course) — 2026 Summer

Volunteering

Certified instructor, the Carpentries — 2020–current

- Teach basic programming and data science skills to students, researchers, and professional
- Online teaching

Organizer, and instructor, Explainable AI study group — 2022–2023

SERVICE

Organizing committee, workshops

- Networks in Science of Science workshop — 2024–current
- 1st workshop on Digital Infrastructures for Scholarly Content Object — 2021

Program Committee, conferences

- ACM/IEEE Joint Conference on Digital Libraries (JCDL) — 2026

- International Conference on Artificial Intelligence in Medicine (AIME) 2024

Reviewer, journals

- *Journal of the Association for Information Science and Technology (JASIST)* 2021, 2026
- *Quantitative Science Studies* 2024
- *Scientometrics* 2024
- *Journal of Academic Ethics* 2023, 2025
- *Journal of the American Medical Informatics Association (JAMIA) Open* 2023
- *Knowledge Organization* 2021

Reviewer, conferences

- The Annual Meeting of the Association for Information Science and Technology (ASIS&T) 2026
- The Web Conference 2027

Program Committee, workshops

- International Workshop on Scientific Knowledge (Sci-K) 2025–current
- International Workshop on Computational Models of Natural Argument (CMNA) 2023–current

Reviewer, workshops

- AI for Accelerated Materials Discovery (AI4Mat) Workshop 2024–current

University of Illinois Urbana-Champaign iSchool service

- Organizer, Center for Informatics Research in Science and Scholarship speaker series 2024–2026
  - The AI Disruption 2026 Spring
  - Generative AI and the Future of Research 2025 Spring, Fall
  - Study Science Scientifically: State of the Art and Prospects for Science of Science 2024 Fall
- Student representative, Diversity Committee AY2023
- Student representative, MS Information Management/Bioinformatics sub-committee AY2019

STUDENT MENTORING (U of I iSchool, unless otherwise noted)

PhD student

- Christoph Stade, UW-Madison iSchool 2025 Summer–current

Master's students

- Yu-Chen Tung 2026 Fall
- Prathamesh Patil 2022 Fall
- Saahil Hiranandani 2021 Spring
- Kartikey Dubey 2021 Fall
- Zhonghe Wan 2021 Fall–2022 Spring

Undergraduate students

- Steven Wu 2026 Fall
- Yoyo Lin 2026 Fall
- Andrew Xie 2023 Fall
- Tongtong Gu 2023 Fall
- Ishita Sarraf, Grinnell College 2023 Summer
- Deyuan (Doreen) Yang, DePauw University 2023 Summer
- Tasnia Haque, Cornell University 2021 Summer
- Tiffany Lam, Cornell University 2021 Summer
- Muhammad Rahman, University of Washington, Seattle 2021 Summer
- Karla González-Cruz, University of Puerto Rico, Cayey 2021 Summer
- Jasmin Yuan 2021 Spring

PROFESSIONAL EXPERIENCE

Director of research and analysis, Beijing Sirithink Technology, China Jun 2016–May 2019

- Supervisor: none/partnership
- Responsibility: managing remote consultants—PhD and master's students in STEM fields—to support technology-related consulting projects

Research fellow, Center for Soft and Living Matter,
Ulsan National Institute of Science and Technology (UNIST), South Korea May 2015–May 2016

- Supervisor: Prof. Steve Granick
- Responsibility: research polymer dynamics in a crowded environment