Julia Hsin-Ping Hsu

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Computational Social Sciences; Community Informatics; Information Access; AI for Social Good; Machine Learning; Social Media Data Analytics; Urban Computing; Civic Technology; Health Informatics

Education

2020–26	**Ph.D.**, Information Technology, George Mason University Dissertation Committee: Dr. Myeong Lee (chair), Dr. Hemant Purohit, Dr. Vivian Genaro Motti, Dr. Jonathan Auerbach	Fairfax, VA, USA
2018-20	**M.S.**, Computer Science, George Mason University	Fairfax, VA, USA
2013-17	**B.S.**, Computer Science, University of Taipei	Taipei, Taiwan

Honors & Awards

2026	Travel Fund from iConference
2026	Dissertation Completion Grant from GMU's Office of the Provost (Spring 2026)
2025	Doctoral Colloquium, ASIST'25
2025	3rd-Place Prize in the Poster Session at the Converge AI Event Organized by the GMU's AI-in-Gov Council
2025	GMU University Travel Grant from Office of the Provost
2024	Conference Bursary Award (with Travel Fund) from Digital Humanities (DH)
2024	3rd-Place Prize at the GMU College of Engineering and Computing Innovation Week Poster Competition
2023	GRA Award from GMU's Center for Advancing Human-Machine Partnership
2022	GMU International Travel Grant from Associate Provost for Graduate Education
2020	Winner of Wells Fargo Campus Analytics Challenge – NLP and Topic Modeling
2013-17	Outstanding Achievement Award by Taipei City Council for 4 Academic Years
2017	Winner of the University of Taipei Social Network Design Competition
2013-17	University of Taipei High Scholar Achievement Award for 4 Consecutive Years
2013	Winner of the University of Taipei Software Creative Design Competition

Publications

Journal Articles

J2. **Hsu, J. H.-P.**, Mahabir, R., Gonzales, V., Gkountouna, O., Hilal, A. & Lee, M. Predicting the success of local gatherings: A comparison of organizer- and participant-side success in Meetup. *Cities* **169,** 106530. ISSN: 0264-2751. https://www.sciencedirect.com/science/article/pii/S0264275125008339 (2026).
IF: 6.0; SJR: Q1 in Urban Studies/ Development/ Sociology and Political Science.

J1. Kim, J., **Hsu, J. H.-P.**, Sohn, G., Lee, G. M. & Lee, M. Leveling Socioeconomic Disparities: The Role of Service Availability in School Dropout Rates. *Research on Social Work Practice*, 10497315251377009. https://doi.org/10.1177/10497315251377009 (2025).
IF: 2.24; SJR: Q1 in Sociology and Political Science/ Social Sciences.

Peer-reviewed Conference Proceedings

C6. Prazak, I., Padovani, L., Lim, Y., **Hsu, J. H.-P.** & Lee, M. *Disability Misinformation on Facebook: A Comparison of LLM-based Fact-Checking Tools* in *iConference 2026 Proceedings* (2026).

C5. **Hsu, J. H.-P.** & Lee, M. *From Open-Ended Text to Taxonomy: An LLM-Based Framework for Information Sources for Disability Services* in *Proceedings of the Association for Information Science and Technology* **62** (2025), 915–919. https://asistdl.onlinelibrary.wiley.com/doi/abs/10.1002/pra2.1313.

C3. Lee, M. & **Hsu, J. H.-P.** *An Evaluation of GPT-4V for Transcribing the Urban Renewal Hand-Written Collection* in *Digital Humanities (DH '24)* (2024). **Bursary Award**.

C2. **Hsu, J. H.-P.**, Shin, H., Park, N. & Lee, M. *Two-sided Cultural Niches: Topic Overlap, Geospatial Correlation, and Local Group Activities on Event-based Social Networks* in *Proceedings of the 11th International Conference on Communities and Technologies* (2023), 54–63. https://doi.org/10.1145/3593743.3593758.

C1. **Hsu, J. H.-P.**, Wang, J. & Lee, M. *Towards an Expectation-Oriented Model of Public Service Quality: A Preliminary Study of NYC 311* in *International Conference on Social Informatics* (2022), 447–458. https://doi.org/10.1007/978-3-031-19097-1_31.

Theses

D1. **Hsu, J. H.-P.** Measuring the Fragmentation of Disability Service Information: Ecological Dynamics of Information Access. *George Mason University Press (forthcoming).*

Non-refereed Publications and Reports

R2. Lee, M., Abubakr, L., Shrivastava, T., **Hsu, J. H.-P.**, Whitman, S. A. & Kim, P. *2024 Assessment of Virginia's Information Ecology of the Disability Services System* (2024). https://vbpd.virginia.gov/wp-content/uploads/2024/08/2024-Assessement-of-Information-Ecology.pdf.

R1. Bui, L., Gerson, S., Lincicum, M., Samson, L., Zhang, Z., **Hsu, J. H.-P.** & Lee, M. Do YouTubers Promote Bullshiting using ChatGPT? Exploring the Use of Large-Language Models in YouTube Videos and Their Risk Landscapes. *Journal of Student-Scientists' Research* **5** (2023).

Presentations

P7. **Hsu, J. H.-P.**, Burcu, T., Lybarger, K. & Lee, M. *An AI-Based Framework for Understanding Occupational Injuries across Virginia.* Virginia Academy of Science, Engineering and Medicine **(VASEM) Summit on Artificial Intelligence**. Alexandria, VA, USA. Oct. 2025.

P6. **Hsu, J. H.-P.**, Burcu, T., Lybarger, K. & Lee, M. *An AI-Based Framework for Understanding Occupational Injuries across Virginia.* **GMU AI-in-Gov Council**. Arlington, VA, USA. Sept. 2025. **3rd-Place Prize in the Poster Session**.

P5. **Hsu, J. H.-P.** *Mapping the Information Ecology for People with Disabilities: A Taxonomy of Information Sources using Large Language Model.* **George Mason University Information Sciences and Technology PhD Symposium**. Fairfax, VA, USA. Apr. 2025.

P4. Lee, M., **Hsu, J. H.-P.**, Plaza, R., Gonzales, V., Zhang, Z. & Mahabir, R. *Collaborating to Success: Analyzing the Collaboration Networks of Gaming YouTubers.* International Conference on Computational Social Science **(IC2S2)**. Philadelphia, PA, USA. July 2024.

P3. Lee, M., **Hsu, J. H.-P.**, Plaza, R., Zhang, Z. & Mahabir, R. *How Do Gaming YouTubers' Collaboration Shape Their Success?* International School and Conference on Network Science **(NetSci)**. Quebeck City, Canada. June 2024.

P2. **Hsu, J. H.-P.**, Plaza, R., Zhang, Z., Mahabir, R. & Lee, M. *How Do Gaming YouTubers' Collaboration Shape Their Success? Implications for Embeddedness in Streamers' Collaboration Network.* GMU College of Engineering and Computing Innovation Week (**I-Week**). Fairfax, VA. Feb. 2024. **3rd-Place Prize in the Grad-track Poster Session**.

P1. **Hsu, J. H.-P.** & Lee, M. *Towards an Expectation-Oriented Model of Public Service Quality: A Preliminary Study of NYC 311* GMU College of Engineering and Computing Innovation Week (**I-Week**). Fairfax, VA. Feb. 2023.

Software

- **Boston 311 Information Deserts**: A map-based visualization platform that demonstrates how the disparities in 311 reports manifest across the City of Boston. A result from the NSF CHS grant #1816763. https://infodeserts.org/

Teaching & Mentoring Experience

2026 **Guest Lecturer, Introduction to Research in Applied Information Technology (AIT 602)**, GMU

2025-26 **Research Mentor**, SAFETI Project (in collaboration with Virginia DOLI), Community Informatics Lab, GMU
- Mentored PhD, Master's, and undergraduate research fellows on machine learning, computational modeling, and data analysis
- Mentee: Gie Myung Lee, Utkarsh Desai and Tugce Gundogdu

2022-23 **Aspiring Scientist Summer Internship Program (ASSIP) Mentor**, GMU
- Mentored ASSIP fellows by providing research guidance, technical support, and project feedback
- Supported ASSIP fellows in developing, writing, and publishing academic papers [C6]
- Mentee: Ian Prazak, Yool Lim, Leah Padovani, Leyat Samson, Linh Bui, Stephen Gerson and Megan Lincicum

2021-22 **Research Mentor**, AI for AI Project, Community Informatics Lab, GMU
- Mentored Master's and undergraduate fellows on feature engineering and statistical analysis of large-scale Meetup data
- Mentee: Ishana Shinde and Victoria Gonzales

2020-22 **Research Mentor and Technical Lead**, Information Deserts and Visualization of Civic Technology Use in DMV Projects, Community Informatics Lab, GMU

- Mentored Master's and undergraduate research fellows in developing a unified database integrating 311 datasets across regions; guided statistical analysis and led the visualization system development team
- Mentee: Tsai-Chin Yu, Samriddhi Dashora and Joel Adeniji

2017 **Teaching Assistant, Python Programming**, University of Taipei

- Prepared teaching materials for Python classes and responded to student questions

2017 **Teaching Assistant, Java Programming**, University of Taipei

- Led lab sessions providing feedback and instruction to 50 students on programming assignments

Participation in Funded Projects

2025-26 **SAFETI: Strategic Analysis for Fine-granular Injury and Fatality PrEvenTion Insight**

Funded by the Virginia Department of Labor and Industry (DOLI)

PI: Dr. Myeong Lee & Dr. Kevin Laybarge (GMU)

- Mentored graduate and undergraduate researchers on data analysis and modeling
- Designed and implemented deep learning models for injury and fatality prediction

2023-24 **Mapping Information Ecology: Understanding the Fragmentation of Disability Service Information**

Funded by Virginia Board for People with Disabilities & U.S. Department of Health and Human Services

PI: Dr. Myeong Lee (GMU) & Co-PI: Dr. Kathleen Pine (ASU)

- Co-authored the grant proposal
- Developed an LLM-assisted framework to analyze large-scale survey data on disability information sources
- Implemented computational network analysis to map information fragmentation

2023-25 **Exploring How Convergence Methods Foster Shared Accountability to Reveal, Map, and Mitigate the Sources and Dynamics of Bias across Social Service Provisioning Systems**

Funded by NSF DASS Program Award #2217706

PI: Dr. Margaret Hinrichs (ASU) & Co-PIs: Dr. Erik Johnston, Dr. Kathleen Pine, Dr. Myeong Lee (GMU)

- Contributed as a graduate research assistant to data analysis

2021-22 **AI for AI: Toward Community-level Human-AI Collaborations in Local Meetups**

Funded by 4VA @Mason

PI: Dr. Myeong Lee (GMU) & Co-PIs: Dr. Ron Mahabir, Dr. Olga Gkountouna, Dr. Amr Hilal (VTech)

• Conducted data analysis and implemented machine learning models to examine local group gathering dynamics

2021 **A Visualization Tool and Assessment Framework for Civic Technology Use in the DMV Area: The Case of 311 Systems During the COVID-19 Outbreak**
Funded by NSF CIVIC Innovation Challenge Stage 1 Award #2043900
PI: Dr. Myeong Lee (GMU) & Co-PI: Dr. Susan Winter (UMD)
• Collected data and integrated 311 datasets across the DMV region
• Analyzed resident reporting behaviors during COVID-19 pandemic

2020-22 **Making Information Deserts Visible: Computational Models, Disparities in Civic Technology Use, and Urban Decision Making**
Funded by NSF HCC Program Award #1816763
PI: Dr. Susan Winter (UMD) & Project Lead: Dr. Myeong Lee (GMU)
• Conducted data analysis on residents reporting behaviors
• Led the web visualization system development team

Workshops, Research Programs & Institutes

2025 Participant in *Mapping Research and Practices on AI in the Public Sector workshop.* ***ASIST'25***
2025 Alumni, *Consortium for the Science of Sociotechnical Systems* ***(CSST)***
2024 Invited participant in NSF Designing Accountable Software Systems (DASS) Workshop

Professional Experience

2019-26 **Graduate Research Assistant**, Community Informatics Lab, George Mason University
• Developed computational algorithms for large-scale data processing, modeling, and pattern discovery
• Conducted interdisciplinary research and collaborated with government and community stakeholders
• Performed comprehensive literature reviews and contributed to research design and analytical frameworks
• Contributed to grant proposal writing, including background research, methodological descriptions and preliminary analyses
• Built interactive web-based visualization systems to visualize research findings

Summer 2024 **The Commonwealth of Virginia Engineering and Science (COVES) Policy Fellow**, Virginia Academy of Science, Engineering, and Medicine (VASEM)
• Worked with the State Council of Higher Education for Virginia
• Ethics-based analysis of AI use in higher education
• Developed policy recommendations for applying GenAI to support students with disabilities

2027-18 **Software Engineer**, MYGUARD Company Limited, Taiwan

- Developed and improved iOS and Android Apps for an international medical foundation and increased 16% of downloads in one year
- Used Python to analyze and generate usage report of Apps to help the medical foundation spread medical knowledge

Scholarly and Professional Services

2022 Student Volunteer, RecSys 2022
2022 Reviewer, SocInfo 2022

Memberships

2023-Present Member, Association for Information Science and Technology (ASIS&T)

2022 Member, ACM RecSys

Technical Skills

Programming Languages/ Databases: Python, C, C++, Java, MATLAB, HTML, CSS, JavaScript, SQL, MongoDB, Spark

Frameworks/ Other: Amazon Web Services, Google Cloud Platform, Azure, Django, Angular, Jenkins, RESTful Web Service (Jersey), React, Rancher, Docker, Android Studio, Git

Languages

Mandarin, English