Xinyue Ye, Ph.D.   *Updated on January 24, 2026*

Endowed Shelby Distinguished Professor in Geospatial AI
Founding Director, ALA-GAINS (Alabama Geospatial AI & INformation Science) Hub
Founding Director, The Future of AI Lecture Series
Co-Director, Alabama Center for the Advancement of AI
Chief AI and Digital Twin R&D Officer, Alabama Transportation Institute
AI for Social Impact Core Lead, Institute for Social Science Research
Director of AI, CONSERVE (Community-Oriented Nature-based Science for Ecosystem Restoration and Versatile Engineering), Alabama Water Institute
The University of Alabama

Founding Editor-in-Chief, Computational Urban Science (ESCI and EI)
Editor-in-Chief, Applied Spatial Analysis and Policy (SSCI)
Assistant Editor, Cities (SSCI)

Fellow and Distinguished Scholar, American Association of Geographers
Fellow, Royal Geographical Society
Senior Member, IEEE

Google Scholar Citation Global Ranking: Urban Analytics (#2), GeoAI (#5), Spatial Data Science (#6), Spatial Econometrics (#9), GIScience (#18)

The world's top 2% scientists by Stanford University on both career-long and year-specific citations (2020-)

EDUCATION

Ph.D.   Geographic Information Science, University of California at Santa Barbara, 2010
            Dissertation: *Comparative Space-Time Dynamics* (NSF DDRI Award)

M.S.   Geographic Information Systems, Eastern Michigan University
            Thesis Project: *Urban Modeling and Land Use Change Detection in Detroit*

M.A.   Human Geography, University of Wisconsin at Milwaukee
            Thesis: *Intra-provincial Inequality in China under Reform*

B.S.   Urban Planning, College of Civil Engineering and Architecture, Zhejiang University

HONORS AND AWARDS

2025   Endowed Shelby Distinguished Professor in Geospatial AI, Department of
                 Geography and the Environment, The University of Alabama (UA)
                 (The first Geospatial AI Endowed Distinguished Professorship in the USA)

                 An Endowed Shelby Distinguished Professor is expected to maintain strong

STEM-focused teaching, research, and scholarship within UA's colleges or research institutes while providing leadership in transformation, innovation, and entrepreneurship. Candidates must hold distinguished national and international recognition, evidenced by election—or demonstrated potential for election—to a National Academy, the American Academy of Arts and Sciences, or an equivalent honorific body.

2025	Chancellor Enhancing Development and Generating Excellence in Scholarship (EDGES) Fellow at Texas A&M University (TAMU)

The Chancellor EDGES Fellowships support and honor mid-career faculty who are making significant marks in their discipline. EDGES Fellowships are awarded to faculty members with national and international acclaim and careers that are on-track for membership in national academies.

2025   American Association of Geographers (AAG) Distinguished Scholar Award (One of the Two Recipients)

AAG Citation: "Dr. Xinyue Ye was awarded the AAG Distinguished Scholarship Honors Award for his transformative work at the intersection of geography, urban planning, and data science. As the Harold L. Adams Endowed Professor at Texas A&M University, he has built an extensive research portfolio that spans multiple disciplines, including geography, urban planning, computer science, engineering, medicine, and public policy. His establishment of pioneering research labs, such as the Urban AI Lab and Computational Social Science Lab, has significantly advanced urban informatics, employing innovative tools like digital twin infrastructures and virtual/augmented reality to enhance urban planning and resilience. Dr. Ye's work has secured over $30 million in external grants, demonstrating his ability to attract substantial research support. His interdisciplinary approach has fostered collaboration across 18 academic departments, resulting in widely cited publications and policy-relevant contributions. Dr. Ye's commitment to community impact is evident in his projects that address socioeconomic disparities, environmental resilience, and spatial data accessibility, particularly benefiting underserved communities.".

2025-   IEEE Senior Member

2025   Inaugural FURP2024 Best Paper Award, Frontiers of Urban and Rural Planning (FURP) from Springer: **Ye, X**., Jamonnak, S., Van Zandt, S., Newman, G., & Suermann, P. (2024). Developing campus digital twin using interactive visual analytics approach. Frontiers of Urban and Rural Planning, 2(1), 9.

2025   Springer Nature Editorial Contribution Award for *Journal of Computational Urban Science*: This award recognizes the assessment of submissions and management of the peer review process, safeguarding the scientific accuracy of the published record.

2025   Springer Nature Author Service Award for *Journal of Computational Urban Science* This award recognizes the service in improving the author experience and ensuring the peer review process is efficient, constructive and fair.

2024-25 UCGIS (University Consortium for Geographic Information Science) I-GUIDE (the Institute for Geospatial Understanding through an Integrative Discovery Environment) Community Champion

2024   J. Thomas Regan Interdisciplinary Prize (Established by the College of Architecture at TAMU's Dean's Advisory Council to honor Regan, former dean of the college and champion of interdisciplinary education in the built environment disciplines, the prize is awarded annually to a faculty member who has demonstrated a commitment to interdisciplinary teaching and/or research in the built or virtual environment disciplines)

2024   Top 10 most cited paper in *Transactions in GIS*: Zhang, X., Zheng, Y., **Ye, X**.*, Peng, Q., Wang, W., & Li, S. (2022). Clustering with implicit constraints: A novel approach to housing market segmentation. *Transactions in GIS*, 26(2), 585-608. **(corresponding author)**

2023   Inaugural Research Impact Award (the only tenured faculty member awarded), Department of Landscape Architecture and Urban Planning, TAMU

2022-   AAG Fellow [No more than 0.2% of AAG Membership could be selected in any single year] [the first scholar elected under the Early/Mid-Career category]

     AAG Fellow Citation: "Dr. Ye has an outstanding publication record and numerous federal grants from agencies such as the U.S. National Science Foundation, the Department of Transportation, the Department of Commerce, the Department of Energy, and the National Institute of Justice to promote human-centered urban informatics, especially the convergent research across disciplines towards urban sustainability and community resilience. His interdisciplinary research and positions held in geography, planning, and computational science provide him with unique insights into the functioning of complex systems such as cities. Dr. Ye has led four different AAG Specialty Groups and served on the AAG International Research and Scholarly Exchange Committee. He is committed to help students develop the knowledge and skills in spatial data science and data analytics that are needed to identify and address the problems of today's world. The AAG is pleased to recognize Dr. Xinyue Ye as an AAG Fellow".

2022-   Fellow, Royal Geographical Society (with IBG)

2022-   National Committee Member (the only social scientist among 16 members), "Foundational Research Gaps and Future Directions for Digital Twins", National Academies of Sciences, Engineering, and Medicine.

2022   Regional Development and Planning Distinguished Scholar Award, AAG

2022   Open Educational Resource Award (the only tenured faculty member awarded), by the Texas A&M Student Government Association, in collaboration with the Office of the Provost and the Texas A&M Libraries [This award recognizes faculty members demonstrating exemplary use of open access materials in their classroom]

2021   Team award for W.K. Kellogg Award for Exemplary Community Engagement by the Association of Public and Land-grant Universities (APLU) [One of two national awards, given to The Texas Target Communities program and ENDEAVR Institute, http://endeavr.city/about-us/team-leaders]

2021   Team award for Smart 50 Awards by Smart Cities Connect Foundation annually recognizing global smart cities projects, honoring the most 50 innovative and influential work [ENDEAVR Institute, http://endeavr.city/about-us/team-leaders]

2021   Top 10 Young Scientists named by the World Geospatial Developers Conference (Selected by a committee including members of National Academy of Germany and British Academy of Social Sciences)

2021   Rural and Environmental Research Award, the Aging in Public Health Section at the American Public Health Association conference, "The associations between tree canopy and street falls among older adults aged 65 and older" (Lee, S., **Ye, X.,** & Nam, J.)

2021   Top 10% most cited *PLOS One* papers published in 2016: <u>Wu, C.,</u> **Ye, X.,** Ren, F. Wan, Y., Ning, P., & Du, Q. (2016) Spatial and social media data analytics of housing prices in Shenzhen, China, *PLOS One*. DOI: 10.1371/journal.pone.0164553 (<u>the first author is a student</u>)

2021   One of three featured books by Springer at Annual Meeting of AAG: Book: **Ye, X.** & Liu, X. (Eds.) (2019) Cities as Social and Spatial Networks, *Springer*

2021-25   Harold L. Adams Endowed Professor, Department of Landscape Architecture and Urban Planning, TAMU (developing innovative frameworks and tools that address critical challenges in understanding and managing urban systems and socioeconomic dynamics)

2020   Editor's Choice Article: Zhang, D., Zhang, X., Zheng, Y., **Ye, X*.,** Li, S., & Dai, Q. (2020). Detecting intra-urban housing market spillover through a spatial Markov Chain Model. *ISPRS International Journal of Geo-Information*. DOI: 10.3390/ijgi9010056 **(corresponding author)**

2019   Outstanding Achievement in Research Award (granted annually to a faculty member in the College of Computing, NJIT)

2019   A Top 25 most cited paper during 1981-2019 in Jingji Dili (Economic Geography, Chinese SSCI Journal): Li, W., **Ye, X**., & Sun, Y. (1999). The Assessment of Urban Human Settlements, *Economic Geography*, 38-43.

2019   A Top 20 most read paper in Tijdschrift voor Economische en Sociale Geografie (Journal of Economic & Social Geography, published by Wiley-Blackwell on behalf of the Royal Dutch Geographical Society, SSCI Journal, 2017-2018): Du, Q., Wu, C., **Ye, X*,** Ren, F., & Lin, Y. (2018) Evaluating the Effects of Landscape on Housing Prices in Urban China. *Tijdschriftvoor Economische en SocialeGeografie*, DOI: 10.1111/tesg.12308 **(corresponding author)**

2019   Best Service Award, The 8th International Conference on Computational Data and Social Networks (CSoNet 2019)

2017   David Olson Excellence Award (granted annually to only one faculty member who has stood as a leader, mentor, and advocate for graduate students of Department of Geography, Kent State University, KSU).

2016   Taylor & Francis and IJGIS Special Issue Award for the Most Popular Special Issue Published in *International Journal of Geographical Information Science*: "Human Dynamics in the Mobile and Big Data Era" (Shaw, S., Tsou, M, & **Ye, X.**)

2016-17   Academic Year Research and Creative Activity Appointment Award, KSU

2016   Regional Development and Planning Distinguished Service Award, AAG

2014   Geography Faculty Research Excellence Award, KSU

2014   Group Service Award, CPGIS

2013   Personal Service Award, The International Association of Chinese Professionals in Geographic Information Science (CPGIS)

2012   Regional Development and Planning Emerging Scholar Award, AAG

2011   National First-place Award of Research and Analysis, University Economic Development Association

2008   Doctoral Dissertation Research Improvement Award, National Science Foundation

2006   Graduate Student Paper Award (International Competition), University Consortium for Geographic Information Science (UCGIS) (Among 10 national recipients)

2004   ESRI/GIScience Student Scholarship, Third International Conference on

Geographic Information Science (Among 23 global recipients)

ACADEMIC APPOINTMENTS

2025-   Founding Director, ALA-GAINS (Alabama Geospatial AI & INformation Science) Hub, UA

2025-   Founding Director, The Future of AI Lecture Series, UA

2025-   Co-Director, Alabama Center for the Advancement of AI, UA

2025-   AI for Social Impact Core Lead, Institute for Social Science Research, UA

2025-   Director of AI, CONSERVE (Community-Oriented Nature-based Science for Ecosystem Restoration and Versatile Engineering), Alabama Water Institute

2025-   Chief AI and Digital Twin R&D Officer, Alabama Transportation Institute

2025-   Adjunct Professor, Lee J. Styslinger Jr. College of Engineering (Affiliate), College of Community Health Sciences (Affiliate), School of Medicine (Affiliate), & Culverhouse College of Business (Affiliate), UA

2025-   Endowed Shelby Distinguished Professor in Geospatial Artificial Intelligence, Department of Geography and the Environment, The University of Alabama (UA)

2025-   Adjunct Professor, Dept. of Landscape Architecture & Urban Planning, Texas A&M University (TAMU)

2024-25   Texas A&M Telehealth Institute Inaugural Fellow

2024-   Adjunct Graduate Faculty, the College of Engineering and Computer Science, Texas A&M University-Corpus Christi

2023-25   Full Professor, Dept. of Landscape Architecture & Urban Planning, Dept. of Geography (Affiliate), Dept. of Computer Science & Engineering (Affiliate), Dept. of Multidisciplinary Engineering (Affiliate), and Institute of Science, Technology & Public Policy (Affiliate), Section of Visual Computing and Interactive Media, School of Engineering Medicine (Affiliate), School of Performance, Visualization, and Fine Arts (Affiliate), Texas A&M University (TAMU)

2023-25   Faculty Fellow of Strategic Initiatives and Partnerships for The Division of Research, TAMU

2023-25   Faculty Affiliate, Consortium for Energy and Data Science, TAMU

2023-25   Faculty Fellow, Texas Sea Grant

2022-25   Director, Center for Geospatial Sciences, Applications and Technology, established by the Texas A&M Board of Regents

2022-23   Interim Director, Center for Housing and Urban Development, TAMU

2022-25   Founding Director, TAMIDS Urban Artificial Intelligence Lab, TAMU

2022-25   Faculty Affiliate, The Texas A&M Global Cyber Research Institute

2022-25   Faculty Fellow, Texas OneGulf Network of Experts (TONE)

2022-25   Faculty Fellow, Institute of Science, Technology and Public Policy, The Bush School of Government and Public Policy, TAMU

2021-25   Harold L. Adams Endowed Professor, Department of Landscape Architecture and Urban Planning, TAMU

2021-22   Kinder Scholar, The Kinder Institute for Urban Research, Rice University

2021-22   Associate Director, Center for Housing and Urban Development, TAMU

2021-25   Faculty Fellow, Microclimatic Design Research Group, TAMU

2020-25   Faculty Fellow, Center for Health Systems & Design; Center for Housing and Urban Development; Hazard Reduction and Recovery Center; Institute of Data Science; Energy Institute; Center for Population Health and Aging; TAMU

2020-25   Collaborating Faculty, TRIPODS Research Institute for Foundations of Interdisciplinary Data Science, TAMU

2020-   Team Co-leader, ENDEAVR (Envisioning the Neo-traditional Development by Embracing the Autonomous Vehicles Realm) Institute, TAMU

2020-25   Founding Director, Urban Data Science Lab, TAMU

2020-23   Associate Professor, Dept. of Landscape Architecture & Urban Planning, TAMU

2018-20   Associate Professor, Department of Informatics, College of Computing; Director, Urban Informatics & Spatial Computation Lab; Core Faculty, Center for Big Data, New Jersey Institute of Technology (NJIT)

2020   Faculty Affiliate, New Jersey Smart Cities Working Group (Princeton, Rutgers, NJIT, Stevens Institute of Technology, and New Jersey Office of Innovation)

2019-20   Faculty Affiliate, DIMACS (the Center for Discrete Mathematics and Theoretical Computer Science), NJIT-Rutgers University

2017-18   Visiting Professor, Center for Geographical Analysis/Institute for Quantitative Social Science, Harvard University

2013-18   Assistant/Associate Professor, Department of Geography and School of Digital Sciences, Director of Computational Social Science Lab, Kent State University

2010-13   Assistant Professor, Center for Regional Development (Department of Commerce's Economic Development Administration University Center) & School of Earth, Environment, and Society, Bowling Green State University (BGSU)

EDITORIAL APPOINTMENTS

2025-   Editor-in-Chief, *Applied Spatial Analysis and Policy*

2025-   Co-Editor, *Human Dynamics in Smart Cities* book series by Springer

2025-   Assistant Editor, *Cities*

2024-   Associate Editor, *Spatial Information Research*

2024-25   Associate Editor, *Applied Spatial Analysis and Policy*

2024-   Editorial Board Member, *Journal of the American Planning Association*

2022-   Editorial Board Member, *Nature: Scientific Reports*

2022-   Editorial Board Member, *Transactions in GIS*

2022-25   Editorial Board Member, *Cities*

2022-   Editorial Board Member, *Journal of Social Computing*

2021-   Associate Editor, *Journal of Planning Education and Research*

2021-   Founding Editor-in-Chief, *Computational Urban Science*

2020-   Associate Editor, *International Journal of Applied Geospatial Research*

2018-   Editorial Board Member, *Journal of Geovisualization and Spatial Analysis*

2017-23   Editorial Board Member, *Big Earth Data*

2011-   Associate Editor, *Stochastic Environmental Research & Risk Assessment*

2011-   Co-Editor, *Annual Proceeding on International Conference on Geoinformatics*

2015-18   Associate Editor, *Papers in Applied Geography*

2011-20   Editorial Board Member, *International Journal of Applied Geospatial Research*

SIGNIFICANT LEADERSHIP ACCOMPLISHMENTS

Faculty Fellow of Strategic Initiatives and Partnerships for The Division of Research, TAMU (2023-2025):
Overview: As the Faculty Fellow, I work closely with the Associate Vice President for Research, Strategic Initiatives, to advance research development and foster interdisciplinary and translational research at Texas A&M University. Specifically, I support i) assessment and development of collaborative strategic research initiatives, ii) faculty engagement activities including workshops and brainstorming sessions aimed at generating actionable ideas, and iii) engagement with external stakeholders including funding agencies, National Laboratories, and The Texas A&M University System regional universities.

- Led the TAMU Generative AI in Research Working Group: reviewed and finalized best practices for Generative AI research and explored development of generative AI tools.
- Co-Led AI in Research Working Group to develop the overall strategy for the university AI: Develop and communicate best practices for applications of AI and machine learning in research; integrate and advance AI methodologies across various research disciplines; promote interdisciplinary collaborations in AI and foster an environment where diverse perspectives converge to create innovative AI solutions; determine infrastructure needs to support recommendations. Pursue agreements with the major cloud providers to support our research operations. A key focus needs to be in data privacy and security.
- Served on the university wide ad-hoc committee that identified strategic research priorities.
- Served on the planning committees for strategic initiative workshops including Food-Energy-Water-Health (FEWH) Nexus, Space Exploration, and AI. Assisted with development of scope and agenda for the workshops:
- Assisted with development of guidelines for Strategic and Recurring Limited Submissions.
- Assisted with defining list of Peer and Aspirant Peer Institutions Comparators for TAMU Strategic Research Sub-Themes.
- Co-hosted weekly meetings with The Texas A&M Institute of Data Science (TAMIDS) to develop algorithms for team formation in response to specific calls for proposals.
- Assisted with identification of faculty expert lists for various collaborative opportunities.
- Engaged external stakeholders, such as NIST, to align TAMU researchers' expertise with emerging opportunities such as the U.S. AI Safety Institute Consortium.

Director, Texas A&M Center for Geospatial Sciences, Applications, and Technology (GeoSAT) (2022-2025):

Overview: GeoSAT was established by the Texas A&M Board of Regents. As the Director, I aim to foster excellence in research, education, and outreach activities through innovative development and use of geospatial technology solutions that will advance interdisciplinary scientific inquiry, enhance conceptual and experiential learning, and promote technology transfer and capacity building.

- Fundraising: I have secured funding through various contracts, grants, and agreements, which has been crucial in supporting the operational needs of the Center, including the salaries of five key staff members (postdocs), nine doctoral students, two master students, and other essential resources.
- Faculty Reporting and People Management: I oversaw the integration of faculty into the center's executive committee, highlighting my ability to manage people and maintain collaborative relationships with 100+ faculty across all colleges on campus.
- Budget Management: I have secured approximately $30 million in funding from 13 federal agencies, as well as various industry partners and private foundations since 2010, and have established five research centers across four different universities, ranging from R2 to R1 institutions. My expertise in coordinating multimillion-dollar projects, building large multidisciplinary teams, and managing complex research infrastructure underscores my strong budget management capabilities.
- Academic Accomplishment: The GeoSAT Center is internationally known for the pioneering work on urban digital twin, spatial decision support system, and urban climate science.
- Mission and Values: I have upheld the center's mission to advance geospatial research, teaching, and outreach. This is evidenced by the establishment of a centralized GIS Help Desk, aligning with the center's interdisciplinary values. My ability to engage a diverse range of stakeholders in the center's mission supports this inclusive approach.
- Principles of Leadership: I have exhibited a transparent and collaborative leadership style, engaging an executive committee and integrating staff from other departments. I am committed to shared governance and inclusive decision-making processes.
- Understanding the Competitive Landscape: I have positioned the GeoSAT Center effectively within the broader academic and research community by securing funding, maintaining collaborative partnerships, and ensuring the center's continued relevance.

Founding Editor-in-Chief, Journal of Computational Urban Science (Published by Springer) (2021-):
Overview: As the founding editor-in-chief of Computational Urban Science (JCUS), I have successfully steered the journal to become a leading publication in the intersection of computational sciences and urban studies. Under my leadership, the journal has made remarkable strides in a short period. Since its inception in March 2021, the journal has quickly become a respected platform for researchers worldwide, contributing to the ongoing development of intelligent and resilient cities.

- Rapid Indexing and Recognition: JCUS was indexed by SCOPUS in November 2022. By September 2023 (about 2.5 years after our first publication), the journal achieved inclusion in the Web of Science's Emerging Sources Citation Index (ESCI), a major milestone showcasing its rapid growth and increasing influence in the field.
- Further Indexing and Q1 Ranking: In February 2024, JCUS was indexed by EI Compendex, further solidifying its standing in the academic community. Subsequently, in

June 2024, JCUS received its first Cite Score from Elsevier, a notable 4.1, placing it in the Q1 category under social sciences (urban studies).

- Interdisciplinary Focus: The journal has successfully promoted the integration of computational disciplines with urban science, bridging the gap between theory and application. The journal's scope includes a wide array of topics, such as agent-based models, multi-scale urban modeling, privacy in big data, and spatiotemporal social network analysis.
- Towards Sustainability: over 50% of the articles published in JCUS were directly related to one or more of the 17 Sustainable Development Goals (SDGs). It reflects JCUS's commitment to promoting research that not only advances urban computing but also contributes to the global effort to achieve sustainable and resilient cities.

Founding Director, ALA-GAINS (Alabama Geospatial AI & INformation Science) Hub (2025-):

Overview: The ALA-GAINS Hub is a strategic, co-branded initiative that unifies and amplifies the University of Alabama's strengths in GeoAI and AI-driven spatial intelligence. It integrates interdisciplinary laboratories and research efforts to advance high-impact work in smart cities, spatial computing, digital twins, infrastructure resilience, transportation, hydrology, and water resources while aligning UA's leadership with emerging federal and industry priorities.

- Initiate campus-wide Future of AI lecture series to engage faculty, students, and external thought leaders in shaping UA's AI vision.
- Promote AI and GeoAI initiatives across multiple colleges and major university research institutes to build a broadest and sustained chain of collaboration, engaging diverse disciplines in shared innovation efforts.
- Co-coordinate campus-wide large-scale major research committee and interdisciplinary AI proposal submissions to catalyze transformative, cross-cutting programs.
- Promote collaboration with universities across Alabama and other states to co-develop regional and city-scale digital twins that support sustainability, resilience, and long-term strategic planning.

RESEARCH FUNDING

External Funding

2025-2026   Institutional PI, CCOFFER: Community Co-Financed Flood and Energy Resilience, National Academies, $300,000

2025-2026   Institutional PI, CIVIC-FA Track A: Co-created Digital Twins for Heat-resilient Home Rehab Co-design, National Science Foundation, $700,000

2025-2026   Co-PI, Cross Sectional Survey on Emerging Environmental Pollutant Exposure and Prevalence of Obesity in Communities for Better Health Outcomes, Baptist Health Foundation, $588,000

2024-2027	Institutional PI, Excellence in Research: Constructing Urban Digital Twins via Responsible Foundation AI for Community Resilience, National Science Foundation, $1,000,000
2024-2025	Institutional PI, CIVIC-PG Track A: Create an Ethical Urban Digital Twin to Co-design Heat Mitigations for Integrated Indoor and Outdoor Environments, National Science Foundation, $75,000
2024-2025	Co-PI, Airport Digital Twin, San Antonio International Airport, $25,000
2023-2024	Institutional PI, CIDM-DKG: Collective Intelligence Decision Making via Dynamic Knowledge Graph with Trusted Cross-Organizational and Privacy Preserving Integration, Acquisition Innovation Research Center Systems Engineering Research Center, Department of Defense, $75,000
2023-2027	Co-PI, Digital-Twin Enabled Extended Active Safety Analysis for Mixed Traffic, Federal Highway Administration, $734,554
2023-2026	Co-PI, The Center of Excellence in Hispanic Housing Studies, Department of Housing and Urban Development, $1,832,634
2023-2025	Co-PI, Community-driven Geospatial Approach to Improving Public Health Data Systems in Beaumont-Port Arthur, Texas, National Academies and Robert Wood Johnson Foundation, $1,488,160
2023-2025	Institutional PI, Planning: Assessing Cyber Victimization Risk of Job Searching in the Hybrid World, National Science Foundation, $100,000
2023-2024	Co-PI, Advanced Technologies and Workforce Development for Coastal Adaptation and Resilience in Texas, Department of Commerce and National Oceanic and Atmospheric Administration, $269,694
2023-2025	Institutional PI, RESTORE Centers of Excellence: Towards Targeted Risk Mitigation: Community Engaged, Fast Impact Estimation of Extreme Weather using Big Social and Climate Data, Texas OneGulf, Department of the Treasury, $532,988
2023-2026	Co-PI, Ultra-Wideband Fall Detection and Prediction Solution for People Living with Dementia, National Institutes of Health, $2,851,854
2023-2024	Institutional PI, Workshop on Atmospheric and Urban Digital Twins, National Science Foundation, $49,999
2023-2026	Co-PI, DEAP (Data Science Equity, Access, and Priority in Research and Education) Institute in Research and Education for Science Translation via Low-Resource Neural Machine Translation, NASA, $1,500,000

2022-2024   Institutional PI, NSF Convergence Accelerator Track I: OpenMatFlo: A Platform for Designing, Producing, and Supplying Greener Inks for Additive Construction under Uncertainties, National Science Foundation, $744,893

2022-2025   Institutional PI, Investigating the Combined Impact of Spatial Social Networks and Environmental Exposure on Minority Youths' Mental Health, Centers for Medicare & Medicaid Services, Department of Health and Human Services, $333,020

2022-2023   Co-PI, CAS Climate: Synthesizing and assessing wholistic urban climate solutions in Texas, National Science Foundation, $42,670

2021-2026   Senior Personnel, Category II: ACES - Accelerating Computing for Emerging Sciences, National Science Foundation, $10,000,000 ($5,000,000 facility +$5,000,000 operation).

2021-2026   Advisor, CREST (Centers of Research Excellence in Science and Technology) Center for Geospatial and Environmental Informatics, Modeling and Simulation (established in TAMUCC, $4,995,354.00), National Science Foundation, $8,000.

2021-2024   PI, EAGER: SAI-E: Synchronizing Decision-Support via Human- and Social-centered Digital Twin Infrastructures for Coastal Communities, National Science Foundation, $298,982.

2021-2023   Senior Personnel, Developing AI-Driven Safe Navigation Tool, USDOT National University Transportation Center (UTC), $349,970.

2021-2022   Co-PI, Rapid damage prediction from social media using historical big data and deep learning, Microsoft AI for Humanitarian Action, $150,000.

2021-2023   Co-PI, Building Equitable Safe Streets for All: Data-Driven Approach and Computational Tools, USDOT National University Transportation Center (UTC), $320,000.

2021   Co-I, CNH-L: People, Place, and Payments in Complex Human-Environment Systems, National Science Foundation, $4,709.

2020-2023   Co-PI, Exploring the Safety Impacts of the Older Population's Access to Automated Vehicles and Telemedicine: A Real-World Experiment in Small and Rural Communities (ENDEAVRide), USDOT National University Transportation Center (UTC), $494,855.

2020-2022   Senior Personnel, Connected Vehicle Data Safety Applications, USDOT National University Transportation Center (UTC), $269,550.

2020   Co-PI, Social Vulnerability, Mobility, and COVID-19 Spatial Mortality Patterns, National Science Foundation-funded Social Science Extreme Events Research (SSEER) Network and the CONVERGE facility housed at the Natural Hazards Center at the University of Colorado Boulder, $1,000 to initiate the national group.

2020-2024   Co-I, The Rise of Anti-Social Behaviour in Social Media, SSHRC (Social Sciences and Humanities Research Council) Insight Grant, Canada, CA$ 167,781.

2019-2020   Institutional PI, Convergence Accelerator Pilot (RAISE): Open Knowledge Network for Spatial Decision Support, National Science Foundation, $998,415.

2019-2022   Institutional PI, Using Sentiment Analysis and Topic Modeling in Assessing the Impact of Police "Signaling" on Investigative and Prosecutorial Outcomes in Sexual Assault Reports, National Institute of Justice, $714,199.

2019-2020   Co-PI, Apply Natural Language Processing and Deep Learning to EMR Management, Preprocessing and Decision Making, National Institute of Health through New Jersey Alliance for Clinical and Translational Science, $30,000.

2019-2020   PI, Transportation Data Analytical Tools - Phase II (Creation of Sidewalk Inventory of the NJTPA Region from Color Infrared Orthoimagery or Google Street View Data, USDOT/North Jersey Transportation Planning Authority, $99,985.61.

2017-2021   Co-I, Research Experience for Undergraduates on Computational Data Analytics for Advancing Human Services, National Science Foundation, $327,808.

2018-2023   Contributing Faculty, IUCRC: Center for Big (Data Deep) Learning, National Science Foundation, $750,000.

2017-2020   Institutional PI, SI2-SSE: GeoVisuals Software: Capturing, Managing, and Utilizing GeoSpatial Multimedia Data for Collaborative Field Research, National Science Foundation, $500,000.

2017   Science Committee Member, Agent-Based Modeling 2017: Agent-Based Models in the Social, Human-Environment, and Life Sciences, National Science Foundation, $3,000.

2016-2018   Co-PI, S&CC: Support Community-Scale Study by Visual Analytics of Human Mobility and Opinion Data from Social Media Data, National Science Foundation, $100,190.

2015-2018   Co-PI, SI2-SSE: Collaborative Research: TrajAnalytics: A Cloud-based Visual Analytics Software System to Advance Transportation Studies Using Emerging Urban Trajectory Data, National Science Foundation, $300,000.

2014-2019   Institutional PI, IBSS: Spatiotemporal Modeling of Human Dynamics across Social Media and Social Networks, National Science Foundation, $999,887.

2012-2013   Institutional PI/CNS IRG2 Collaborator, Center for Nanotechnology in Society, National Science Foundation, $5,000.

2011-2013   Co-PI, University Center Program. Department of Commerce, Economic Development Administration, $800,000.

2011-2012   Co-PI, Coastal Ohio Wind, Department of Energy, $2,600,000.

2010-2011   Senior Personnel, Williams County Economic Adjustment Strategy. Williams County Board of Commissioners, $87,500.

2010   Senior Personnel, NW Ohio Solar Energy Hub of Innovation, Ohio Department of Development, $72,250.

2009-2011   Co-PI, University Center Program. US Department of Commerce, Economic Development Administration, $320,000.

2008-2009   PI (Advisor: Serge Rey), Doctoral Dissertation Research Improvement Grant: Comparative Space-Time Dynamics, National Science Foundation.

Internal Funding

2025-2026   Co-PI, Smart Cool Transit: Human-Environmental Sensing and GeoAI for Heat-Resilient Public Transit Infrastructure, Texas A&M ArtSci Research Grants, $24,000.

2025-2026   Co-PI, From Hybrid to Cyborg Landscapes: A Convergence Framework for the Sociogeomorphology of Future Lowlands, Texas A&M ESI Faculty Planning Grant program, $25,000.

2025-2026   Co-PI, Examining Telemedicine Booths as a Community-based Intervention to Improve Healthcare Access in Minority and Underserved Communities, Texas A&M Office of the Vice President for Research, $45,000.

2025-2026   Co-PI, The Future of Student Support: AI-Empowered Digital Twin Campus and Virtual Coach for Students with Specific Learning Disabilities and Attention Deficit Hyperactivity Disorder, Texas A&M Office of the Vice President for Research, $57,000.

2025   Co-PI, Food, Energy, Water, and Health Nexus (FEWHN) Soil for Sustainable Development Center Proposal Development, $10,000.

2025   Co-PI (I designated my postdoc as the PI for this grant to support his

development), Ethical and Explainable GeoAI Workshop: Building Transparent, Fair, and Accountable GeoAI Systems, Texas A&M Institute of Data Science, $3,500.

2024-2026   Co-PI (I designated my postdoc as the PI for this grant to support her development), Mapping Cool Corridors: Thermal Exposure and Shade Dynamics for a Walkable TAMU, Texas A&M Institute of Data Science's Seed Program for AI, Computing, and Data Science, $20,000.

2024-2026   Co-PI (I designated my postdoc as the PI for this grant to support his development), Optimizing Urban Vehicle Fleet Through Multi-Agent Reinforcement Learning: Integrating Built Environment Factors and Real-Time Road States, Texas A&M Institute of Data Science's Seed Program for AI, Computing, and Data Science, $20,000.

2024-2026   Co-PI (I recommended the junior faculty as the PI for this grant to support her development), Communicating of AI-Generated Images: Perceptions and Cognitions of Creators and Interpreters in Design Education and Outreach, Texas A&M College of Architecture, $20,000.

2024-2026   Co-PI (I recommended the junior faculty as the PI for this grant to support his development), Urban Digital Twin Integration for Energy Optimization in Indoor-Outdoor Campus Environments, Texas A&M Institute of Data Science, $40,000.

2024-2025   Co-PI, Strengthening the Semiconductor Workforce Pipeline for Underrepresented Communities, Texas A&M Semiconductor Institute, $149,941

2023-2026   PI, Campus Digital Twin, Office of Vice President of Planning, Assessment and Strategy, TAMU, $900,000

2023-2024   Co-PI, Integrated Carbon Capture and Utilization via Rapid Electrification (IC-CURE), Targeted Proposal Team Competition, TAMU, $500,000

2023-2024   Co-PI, Exploring the Nexus of CLimate ChangE and AiR Quality (CLEAR), Targeted Proposal Team Competition, TAMU, $500,000

2023   PI, Theoretical and Experimental Framework for Estimating Cyber Victimization Risk in a Hybrid Physical-Virtual World, the inaugural funding from Global Cyber Research Institute, TAMU, $10,000

2023   Collaborative PI, MyEJConcern.AI: Making community concerns about environmental pollution heard, Superfund Research Center, TAMU, $25,000.

2022-2024   PI, Urban Artificial Intelligence Lab, Texas A&M Institute of Data Science, $300,000. (one of the two selected across campus)

2022-2024   PI, Operational Data Science: population downscaling for fine-scale social science research and policy implications, inaugural award of Texas A&M Institute of Data Science Faculty Research Collaboration Program, $60,000.

2022-2023   Collaborative PI, Integrating Crime Pattern Theory and Spatial Analytic Techniques to Examine Youth Crime, Panther RISE Grant Program between Prairie View A&M University and TAMU, $20,000.

2022-2023   Co-I, Empowering Smart and Resilient Communities, Pathways to the Doctorate Collaboration grant, TAMU, $25,000.

2021-2023   Co-PI, Understanding the Impact of Expansion of Health Insurance Coverage in Texas on Financial Well-being, TAMU X-Grant, $324,769.

2021-2022   PI, Urban Data Science, Texas A&M Institute of Data Science Inaugural Course Development Grant Program, $15,000.

2021-2026   Senior Personnel, Enhancing Airborne Particle Measurement Capabilities of Center for Atmospheric Chemistry and the Environment (CACE), Texas A&M Research Development Fund, $939,608.

2021-2022   Co-PI (I recommended the junior faculty as the PI for this grant to support his development), Coastal Flood Visualization with Mobile Virtual and Augmented Realities for Risk Communication, T3: Texas A&M Triads for Transformation, $30,000.

2020   Faculty Advisor, Analysis on Accessibility and Needs of Healthcare Facilities in the Tri-State Area by Integrating GeoSpatial and Social Media Data, Honors Summer Research, New Jersey Institute of Technology, $1,000.

2019-2020   Co-PI, Interactive Q/A Framework and Knowledge Discovery across Dynamic and Heterogeneous Databases, New Jersey Institute of Technology/The Henry J. and Edna D. Leir Research Institute for Business, Technology, and Society, $10,000.

2019-2020   Co-PI, Virtual and Diffusion Analysis of the Edicole Sacre (Street Shrines) of Rome, New Jersey Institute of Technology, $9,500.

2017-2018   Co-PI, Mapping to Support Health Interventions in the World's Most Challenging Environments, Healthy Communities Research Initiative, Kent State University, $25,000.

2017-2018   Co-PI, Developing a Digital Humanities Platform for Researching the History of Innovation, URC Research Seed competition, Kent State University, $10,000.

2015-2017   Co-PI, Digital Humanities Research with Smart Big Data — A Network Framework of Innovation History, Post-Doctoral Proposal Competition (hire a

postdoc for two years), Kent State University, $100,000.

2015-2016   Co-PI, Mapping and Modeling Public Attitude toward Fashion Sustainability in Online Social Media, College of the Arts Catalyst Interdisciplinary Project, Kent State University, $4,500.

2015-2016   Co-PI, GIS-LCCA Integrated Pavement Management, University Research Council, Kent State University, $2,500.

2013   PI, Data Mining of Events: Pursuing Big Data-based Spatiotemporally Integrated Social Sciences over Cyber-infrastructure, Building Strength Major Research Project Award, Bowling Green State University, $10,000.

2011-2012   PI, Identifying Communities at Risk: Space-Time Data Analysis and Toolbox Implementation for Regional Economic Analysis, Faculty Research Committee Faculty Mentoring and Enrichment Award, Bowling Green State University, $5,000.

TRAVEL AWARDS

2016   NSF Travel Award, Workshop on Measuring and Analyzing Interactions among Mobile Entities

2016   NSF Travel Award, Workshop on Innovative Cyberinfrastructure for Integrated Food, Energy, and Water Research

2015   U.S. National Committee (USNC) Award, 27th International Cartographic Conference

2013   NSF Junior Scholar Travel Award, The Second International Conference on Space, Time, and CyberGIS

2013   U.S. National Committee (USNC) Award, 25th International Cartographic Conference

2012   NSF Junior Scholar Travel Award, The First International Conference on Space, Time, and CyberGIS

PUBLICATIONS

My publication activities focus on developing and implementing new spatiotemporal and network methods in physical, virtual, and perceived spaces to better understand inequality, mobility, and diffusion.

Books

2026   Sanchez, T & **Ye, X**. (Eds.) Handbook of Disruptive Urban Technologies and Society. *De Gruyter.*

2025   Huang, X., **Ye, X**., Stewart, K., & Subasish. D., (Eds.) Urban Human Mobility: Practices, Analytics, and Strategies for Smart Cities. *CRC Press*. *doi: 10.1201/9781003503262*

2024   Wei, X. & **Ye, X**. Social Data Analytics in the Cloud with AI. *CRC Press*. (Foreword by Drs. Michael Batty, Budhendra Bhaduri, Michael Goodchild) [the first textbook on cloud-based social data analytics with the assistance of Generative AI] *doi: 10.1201/9781003437611*

2020   **Ye, X**. & Lin, H. (Eds.) Spatial Synthesis: Computational Social Science and Humanities. *Springer*. (Foreword by Drs. Michael Batty, Michael Goodchild, Dan Sui) *doi: 10.1007/978-3-030-52734-1*

2019   **Ye, X**. & Liu, X. (Eds.) Cities as Social and Spatial Networks. *Springer*. *doi: 10.1007/978-3-319-95351-9*

Refereed Journal Articles (* Denotes corresponding author. Graduate/undergraduate students and post-docs are underlined.)

2026   **Ye, X**., Ye, Y., Huang, X., & Onega, T. Wildfires and public health: a comprehensive review of human-centric studies. *GeoHealth.* (accepted)

2026   Wang, D., Lu, C.-T., **Ye, X**., Yigitcanlar, T., & Fu, Y. (2025). Generative AI meets future cities: Towards an era of autonomous urban intelligence. *ACM AI Letters* (accepted)

2026   Yannam, Y. R., Shi, J. Datta, A., Wang, K., Krishnamoorti, R. Powell, J. B., Sengupta, D., & **Ye, X**. Toward a human-centered energy transition: concepts, models, challenges, and research opportunities. *Utilities Policy* (tentative acceptance)

2026   Huang, T., Wu, D., & **Ye, X**. A multi-source approach for digitization and evaluation of traffic control infrastructure data. *Transportation Research Record.* (accepted)

2026   **Ye, X**., Gong, W., Yang, Y., Zou, L., Tu, Z., Huang, X., Li, Z., Ning, H., & Wu, L. Towards Agentic Urban Digital Twins (AUDiTs): Advancing New Urban Science through Human-AI Co-Learning Agents. *Urban Informatics* (accepted)

2026   Gong, W., Wu, L., Zhu, C., Song, Y., & **Ye, X***. (2026). Revealing park visitation under dual environmental threats in a socially stratified city: Evidence from smartphone mobility data in Dallas. *Urban Forestry & Urban Greening*. *doi: 10.1016/j.ufug.2026.129264*

2026   Reed, K., Rybkowski, Z., Bardenhagen, E., Gong, W., Courtney Starrett, C., Ennemoser, B., & **Ye, X***., Enhancing interdisciplinary competence in built environment research: evaluating the impact of a two-day design charrette on undergraduates. *Frontiers of Urban and Rural Planning*.

doi: 10.1007/s44243-025-00073-2

2025   **Ye, X**. & Goodchild, M. Towards ethical GeoDesign in the urban digital twin era. *Journal of Planning Education and Research.* doi: 10.1177/0739456X251359233

2025   **Ye, X**., Zhai, W., & Dong, X. Urban synthetic data for whom? shifting the focus from objects to people. *Journal of Planning Education and Research.* doi: 10.1177/0739456X251383141

2025   Zhou, S., Wu, M., **Ye, X**., Silbernagel, J., Hart, D. A., & Huang, Q. (2025). Advancing smart disaster response by leveraging social sensing and mobile technology. *Geo-Spatial Information Science*. doi: 10.1080/10095020.2025.2588034

2025   Liu, C., **Ye, X*.**, & Xu, Y. Towards urban climate downscaling in the Houston Metro area: an evaluation of the urban weather generator model. *Cities*. doi: 10.1016/j.cities.2025.106618

2025   Sheykhfard, A., Azmoodeh, M., Das, S., **Ye, X**., Koppel, S. Exploring factors influencing user re-ride intentions in shared autonomous shuttle vehicles. *Transport Policy*. doi: 10.1016/j.tranpol.2025.103894

2025   Wu, K., Zhou, Y., Shi, H., Lord, D., Ran, B., & **Ye, X**. (2024). Hypergraph-based motion generation with multi-modal interaction relational reasoning. *Transportation Research Part C: Emerging Technologies.* doi: 10.1016/j.trc.2025.105349

2025   Gong, W., **Ye, X*.**, Wu, K., Jamonnak, S., Zhang, W., Yang, Y., & Huang, X. Integrating spatiotemporal vision transformer into digital twins for high-resolution heat stress forecasting in campus environments. *Journal of Planning Education and Research. doi: 10.1177/0739456X251391121*

2025   Li, S., **Ye, X*.**, Huang, X., Gong, J., Lee, J., Huang, S., & Wu, L. Estimation of global and regional patterns of flows. *Annals of Regional Science*. doi: 10.1007/s00168-025-01419-w

2025   Huang, T., **Ye, X*.**, Yigitcanlar, T., Xu, B., Newman, G., Zhao, B., Ennemoser, B., Wu, D., Kim, J., & Wang, D. Artificial Intelligence in urban design: a systematic review. *Cities*. doi: 10.1016/j.cities.2025.106527

2025   Liu, C., **Ye, X*.**, Xu, Y., Sun, Q., & Xu, Y. Exploring the impact of urban morphology on heat stress: a high-resolution microclimate simulation study. *Environment and Planning B.* doi: 10.1177/23998083251387477

2025   Li, Z., Ning, H., Gao, S., Janowicz, K., Li, W., Arundel, S. T., Yang, C., Bhaduri, B., Wang, S., Zhu, A.-X., Gahegan, M., Shekhar, S., **Ye, X**., McKenzie, G., Cervone, G., & Hodgson, M. E. (2025). GIScience in the Era of Artificial Intelligence: A Research

Agenda towards Autonomous GIS. *Annals of GIS.*
doi: 10.1080/19475683.2025.2552161

2025   **Ye, X**., Newman, G., Zhai, W., Retchless, D., Das, S., Ham, Y., Zou, L., Huang, X., & Zhang, Z. Towards coastal infrastructure resiliency: an AI-enabled decision-support framework for multi-scale comprehension and stakeholder empowerment. *Transactions of the American Philosophical Society. Volume 114: 65-98.*

2025   Bai, W., **Ye, X***., Xie, Y., Van Zandt, S., Huang, X., & Sengupta, D. Reducing AI model biases with a bi-level learning framework: A case study of leveraging Twitter data for damage estimation. *Annals of the American Association of Geographers.*
doi: 10.1080/24694452.2025.2536182

2025   Wu, K., Li, P., Cheng, Y., Parker, S. T., Ran, B., Noyce, D. A., & **Ye, X**. A Digital Twin framework for physical-virtual integration in v2x-enabled connected vehicle corridors. *IEEE Transactions on Intelligent Transportation Systems.*
doi: 10.1109/TITS.2025.3564351

2025   Yigitcanlar, T., Hossain, T., Shaamala, A., & **Ye, X**. Quantum AI urbanism: Redefining the future of Artificial Intelligence in cities. *Journal of Urban Technology.*
doi: 10.1080/10630732.2025.2500826

2025   Yu, J., Li, Y., Huang, X., & **Ye, X**. Data quality and uncertainty issues in flood prediction: a systematic review. *International Journal of Digital Earth*, 18(1), 2495738.
doi: 10.1080/17538947.2025.2495738

2025   **Ye, X**., Li, S., Gong, W., Li, X., Li, X., Dadashova, B., Li, W., Du, J., & Wu, J. Street view imagery in traffic crash and road safety analysis: A review. *Applied Spatial Analysis and Policy. doi: 10.1007/s12061-025-09653-7*

2025   **Ye, X.**, Bai, W., & Huang, X. Enhancing residential building identification in a coastal Texas city: An integrated framework leveraging remote sensing, GIS, and transfer learning techniques. *Photogrammetric Engineering & Remote Sensing.*
doi: 10.14358/PERS.24-00048R3

2025   Xu, Y., Willis, S., Dallmann, A., Cai, H., Hu, L., Zou, L., …, & **Ye, X*.** Urban Climate Adaptation and REsilience (U-CARE) in Texas: Insights from interdisciplinary perspectives. *Applied Spatial Analysis and Policy. doi: 10.1007/s12061-025-09655-5*

2025   Ma, H., Li, J., & **Ye, X*.** Deep learning meets urban design: Assessing streetscape aesthetic and design quality through AI and cluster analysis. *Cities.*
doi: 10.1016/j.cities.2025.105939

2025   Zhao, L. X. S., Lin, Q., Chen, L., Luo, Q., Wu, S., **Ye, X**., Feng, H., & Du, Z. Evaluating large language models on geospatial tasks: A multiple geospatial task benchmarking study. *International Journal of Digital Earth. doi: 10.1080/17538947.2025.2480268*

2025   **Ye, X**., Yigitcanlar, T., Xu, Y., Head, M., Hang, Y., Sanchez, T., <u>Gong, W</u>., & Niyogi, D. Urban planning and IPCC-like city assessments integration for climate resilient cities. *Environment and Planning B. doi: 10.1177/23998083251330940*

2025   Zhong, Q., Han, L., **Ye, X.**, & Yang, L. Effects of green space exposure on acute respiratory illness in community-dwelling older people: A prospective cohort study. *Landscape and Urban Planning. doi: 10.1016/j.landurbplan.2025.105336*

2025   Jafari, M., Starewich, M., Hossain, A., Barua, S., Alnawmasi, N., **Ye, X.,** & Das, S. Assessing motorcyclist injury severity on curved road segments with temporal dynamics and unobserved heterogeneity. *Scientific Reports. doi: 10.1038/s41598-025-97972-7*

2025   **Ye, X.**, Yigitcanlar, T., Goodchild, M., Huang, X., Li, W., Shaw, S., Fu, Y., <u>Gong, W</u>., Newman, G. Artificial Intelligence in urban science: Why does it matter? *Annals of GIS. doi: 10.1080/19475683.2025.2469110*

2025   Jiang, B., Cheng, T., Tsou, M., Zhu, D., & **Ye, X***. Advancing translational human dynamics research: bridging space, mind, and computational urban science in the era of GeoAI. *Computational Urban Science. doi: 10.1007/s43762-025-00171-3*

2025   He, Q., Wu, L., Lee, C., <u>Zhu, C., Bai, W., Guo, W</u>., & **Ye, X**. Greener the safer? Effects of urban green space on community safety and perception of safety using satellite and street view imagery data. *Journal of Criminal Justice. doi: 10.1016/j.jcrimjus.2025.102372*

2025   Dawkins, M., **Ye, X**., Gibson, C., <u>Zhu, C</u>., & <u>Liu, C</u>. A socio-ecological examination of crime in an urban context during the early pandemic. *Journal of Criminology and Criminal Justice Studies. Vol. 3 No. 1. doi: 10.47509/JCCJS.2025.v03i01.05*

2025   **Ye, X**., <u>Du, J</u>., <u>Li, X</u>., Shaw, S., Fu, Y., Dong, X., Zhang, Z., & Wu, L. Human-centered GeoAI foundation models: where GeoAI meets human dynamics. *Urban Informatics. doi: 10.1007/s44212-025-00067-x*

2025   **Ye, X**., <u>Huang, T</u>., Song, Y., Li, X., Newman, G., Lin, Z., Wu, J. Geodesign in the era of artificial intelligence. *Frontiers of Urban and Rural Planning. doi: 10.1007/s44243-025-00054-5*

2025   <u>Gong, W</u>., Lee, C., <u>Li, S., Adkison, D</u>., Li, N., Wu, L., **Ye, X***. Cyber victimization in hybrid space: an analysis of employment scams using natural language processing and machine learning models. *Journal of Crime and Justice. doi: 10.1080/0735648X.2024.2448804*

2025   <u>Liu, C</u>., **Ye, X*.,** Huang, X., & Xu, Y. Vertical dimension of urban thermal environments: A literature survey. *Cities. doi: 10.1016/j.cities.2024.105629*

2025   **Ye, X.**, Huang, T., Song, Y., Li, X., Newman, G., Wu, D., & Zeng, Y. Generating conceptual landscape design via text-to-image generative AI model. *Environment and Planning B. doi: 10.1177/23998083251316064*

2025   Chiu, W., Newman, G., Sansom, G., **Ye, X.**, Rusyn, A., Wu, H., Winckelman, T., & Rusyn, I. MyEcoReporter: A prototype for artificial intelligence-facilitated pollution reporting. *Journal of Exposure Science and Environmental Epidemiology. doi: 10.1038/s41370-025-00747-5*

2025   Chen, C., Han, Y., Galinski, A., Calle Figueroa, C., Carney, J., **Ye, X.**, & Van Westen, C. Integrating urban digital twin with cloud-based geospatial dashboard for coastal resilience planning: A case study in Florida. *Journal of Planning Education and Research. doi: 10.1177/0739456X251316185*

2025   Wang, S., Huang, X., Zhang, M., Bao, S., Liu, L., Fu, X., Zhang, T., Song, Y., Kedron, P., Wilson, J., **Ye, X.**, Yang, C., & Guan, W. Open science 2.0: revolutionizing spatiotemporal data sharing and collaboration. *Computational Urban Science. doi: 10.1007/s43762-025-00165-1*

2025   Peng, Q., Zhao, G., & **Ye, X***. The impact of indoor and outdoor maintenance on multifamily rents: An integrated approach of computer vision, machine learning, and hedonic modeling. *Journal of Housing and the Built Environment. doi: 10.1007/s10901-025-10202-4*

2024   Chukwu, M., Huang, X., Wang, S., Yang, D., & **Ye, X.** Crowdsourcing geographic information for terrorism-related disaster awareness and mitigation: perspective and challenges. *Geo-spatial Information Science. doi: 10.1080/10095020.2024.2442088*

2024   Shaw, S., **Ye, X.***, Goodchild, M., & Sui, D. Human dynamics research in GIScience: challenges and opportunities. *Computational Urban Science. doi: 10.1007/s43762-024-00144-y*

2024   Sanchez, T. Fu, X., Yigitcanlar, T., & **Ye, X**. The research landscape of artificial intelligence in urban planning: A topic analysis of academic publications using ChatGPT. *Urban Science. doi: 10.3390/urbansci8040197*

2024   Yigitcanlar, T., David, A., Li, W., Fookes, C., Bibri, S. E., & **Ye, X**. Unlocking artificial intelligence adoption in local governments: Best practice lessons from real-world implementations. *Smart Cities*, 7(4), 1576-1625.

2024   Zhai, W. & **Ye, X**. Moving towards climate-resilient mobility: Challenges and emerging trends. *Travel Behaviour and Society. doi: 10.1016/j.tbs.2024.100971*

2024   Han, Y., **Ye, X**.*, & Zhu, C. The unequal impact of disasters: Assessing the interplay between social vulnerability, public assistance, flood insurance, and migration in the

U.S. *Urban Informatics. doi: 10.1007/s44212-024-00061-9*

2024   Du, J., **Ye, X.***, Huang, X., Qiang, Y., & Zhu, C. Unveiling multifaceted resilience: A heterogeneous graph neural network approach for analyzing locale recovery patterns. *Environment and Planning B: Urban Analytics and City Science. doi: 10.1177/23998083241288689*

2024   Dvir, R., Vedlitz, A., & **Ye, X.*** Worried (and) sick: How environmental hazards affect Americans' health-related risk attitudes. *Urban Informatics. doi: 10.1007/s44212-024-00057-5*

2024   **Ye, X.,** Zhao, G., Peng, Q., Dawkins, C., Kim, J., & Wu, L. Global trends in housing research over the past three decades. *Computational Urban Science. doi: 10.1007/s43762-024-00129-x*

2024   **Ye, X**., Bai, W., Wang, W., & Huang, X. Enhancing population data granularity: A comprehensive approach using LiDAR, POI, and quadratic programming. *Cities doi: 10.1016/j.cities.2024.105223*

2024   Zhang, H., Zhou, X., Yang, Y., Wang, H., **Ye, X.,** & Tang, G. Advancing process-oriented geographical regionalization model. *Annals of the American Association of Geographers*, 1–26. *doi: 10.1080/24694452.2024.2380893*

2024   Huang, H., Lu, Z., Fan, X., Zhai, W., Zhang, L., Xu, D., Liu, Z., Li, Y., **Ye, X.,** Qin, H., Lanza, K., & Hang, Y. Urban heatwave, green spaces, and mental health: A review based on environmental health risk assessment framework. *Science of the Total Environment. doi: 10.1016/j.scitotenv.2024.174816*

2024   Das, S., Chakraborty, R., Sheykhfard, A., Kutela, B., & **Ye, X.** Using perceptual cycle model and text mining to investigate ambulance traffic crashes. *Transportation Research Record. doi: 10.1177/03611981241270157*

2024   Das, S., Rahman, A., Liu, J., **Ye, X.,** & Kutela, B. Association patterns of work zone crashes using Bayesian network. *Transportation Research Record. doi: 10.1177/03611981241270161*

2024   Wu, L., Jamonnak, S., **Ye, X**.*, Shaw, S., Saxena, N., & Choi, K. Theoretical and experimental framework for estimating cyber victimization risk in a hybrid physical-virtual world. *Journal of Applied Security Research. doi: 10.1080/19361610.2024.2368969*

2024   Li, S., Mohammad, A., Dominique, L., Zhang, H., Zhou, Y., & **Ye, X.** Beyond 1D and oversimplified kinematics: A generic analytical framework for surrogate safety measures. *Accident Analysis and Prevention. doi: 10.1016/j.aap.2024.107649*

2024   Zhou, Q., **Ye, X**., Gianoli, A., & Hou, W. Exploring the dual impact: Dissecting the

impact of tourism agglomeration on low-carbon agriculture. *Journal of Environmental Management*. *doi: 10.1016/j.jenvman.2024.121204*

2024   Li, S., Zhou, Y., **Ye, X.**, Jiang, J., & Wang, M. Sequencing-enabled hierarchical cooperative CAV on-ramp merging control with enhanced stability and feasibility. *IEEE Transactions on Intelligent Vehicles. doi: 10.1109/TIV.2024.3409381*

2024   Zhu, C., Dadashova, B., Lee, C., **Ye, X.**, & Brown, C. Equity in non-motorist safety: Exploring two pathways in Houston. *Transportation Research Part D. doi: 10.1016/j.trd.2024.104239*

2024   Sanchez, T., Brenman, M., & **Ye, X**. The ethical concerns of artificial intelligence in urban planning. *Journal of the American Planning Association. doi: 10.1080/01944363.2024.2355305*

2024   Wang, S., Hu, T., Huang, X., Li, Y., Zhang, C., Ning, H., Zhu, R., Li, Z., & **Ye. X.** GPT, large language models (LLMs) and generative artificial intelligence (GAI) models in geospatial science: a systematic review. *International Journal of Digital Earth. doi: 10.1080/17538947.2024.2353122*

2024   Wu, C., Yang, S., Ma, Y., Liu, P., & **Ye, X.***. Urban green space assessment: A spatial clustering method utilizing multisource data to facilitate zoning planning. *Journal of Urban Planning and Development. doi*: *10.1061/JUPDDM/UPENG-4865*

2024   Zhu, C., **Ye, X.***, Du, J., Hu, Z., Shen, Y., & Retchless, D. Simulating urban energy use under climate change scenarios and retrofit plans in coastal Texas. *Urban Informatics. doi: 10.1007/s44212-024-00046-8*

2024   Hu, N., Zhang, Z., Duffield, N., Li, X., Dadashova, B., Wu, D., Yu, S., **Ye, X.**, Han, D., & Zhang, Z. Geographical and temporal weighted regression: examining spatial variations of COVID-19 mortality pattern using mobility and multi-source data. *Computational Urban Science. doi: 10.1007/s43762-024-00117-1*

2024   Bian, J., Li, W., Chen, A., Usman, M., **Ye, X.**, Li, X., Dadashova, B., Lee, C., & Ory, M. G. Smartphone usage and daily trips: An empirical study of small and rural communities in Texas. *Transportation Planning and Technology. doi: 10.1080/03081060.2024.2332517*

2024   Han, Y., **Ye, X.**, Kayode, A., Mozumder, P., Chen, C., van den Bout, B., & van Westen, C., Retreat from flood zones: Simulating land use changes in response to increasing coastal flood risks. *Cities. doi: 10.1016/j.cities.2024.104953*

2024   **Ye, X.**, Jamonnak, S., Van Zandt, S., Newman, G., & Suermann, P. Developing campus digital twin using interactive visual analytics approach. *Frontiers of Urban and Rural Planning. doi: 10.1007/s44243-024-00033-2*

2024   Wu, C., <u>Gao, F.</u>, **Ye, X.**, & He, Q. Unraveling the impact of urban form on location's irreplaceability: An analysis from the perspective of spatiotemporal heterogeneity. *Transactions in GIS. doi: 10.1111/tgis.13154*

2024   **Ye, X.,** <u>Li, S.</u>, <u>Gao, G.</u>, Retchless, D., <u>Cai, Z.</u>, Newman. G., <u>Du, J.</u>, & Duffield, N. 3D visualization of hurricane storm surge impact on urban infrastructure. *Urban Informatics. doi: 10.1007/s44212-024-00043-x*

2024   Zhou, X., Zhang, H., & **Ye, X**. A multi-hierarchical method to extract spatial network structures from large-scale origin-destination flow data, *International Journal of Geographical Information Science*. doi: 10.1080/13658816.2023.2301305

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2025   Mimi, M. S., Islam, M. M., Ghosh Tusti, A., Somvanshi, S., Das, S., & **Ye, X**. ST-

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2025   Yu, D., Zhuang, D., Jiang, L., Xu, R., **Ye, X.**, Bu, Y., Wang, S., & Wang, G. UQGNN: Uncertainty Quantification of Graph Neural Networks for Multimodal Spatiotemporal Prediction. In *Proceedings of the 33rd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*.

2025   Gong, W., Wang, Y., Cui, S., & **Ye, X**. WIP: Impact of the CHIPS & Science Act on Engineering Education: Analyzing Funding Trends and Institutional Growth, 2025 IEEE Frontiers in Education Conference (FIE), Nov. 2-5, Nashville, TN.

2023   Du, J., & Ye, X. (2023, November). Batch and negative sampling design for human mobility graph neural network training. In Proceedings of the 1st International Workshop on the Human Mobility Prediction Challenge (pp. 47-50).

2023   Li, S., Zhou, Y., **Ye, X**., Jiang, J., & Wang, M. Sequencing-enabled Hierarchical Cooperative On-ramp Merging Control for Connected and Automated Vehicles Conference: 2023 IEEE 26th International Conference on Intelligent Transportation Systems (ITSC).

2023   **Ye, X**., Li, S., Du, J., & Li, W. Design and Implementation of a Human-Centered Interactive Transportation Dashboard for Small Towns through Heterogeneous Spatial Data Integration, Proceedings of the 18th International Conference on Computational Urban Planning and Urban Management (CUPUM). doi: https://doi.org/10.17605/OSF.IO/6YR5V

2022   Du, J., **Ye, X.*,** Newman, G., & Retchless, D. In *Proceedings of the 5th ACM SIGSPATIAL International Workshop on Advances in Resilient and Intelligent Cities* (pp. 7-10). doi: 10.1145/3557916.3567822.

2021   Zhang, Z., Wang, Z., Li, A., **Ye, X**., Usery, E. L., & Li, D. An Al-based spatial knowledge graph for enhancing spatial data and knowledge search and discovery. In Proceedings of the 1st ACM SIGSPATIAL International Workshop on Searching and Mining Large Collections of Geospatial Data, pp. 13-17.

2020   Chen, L., Hu, H., Ling, D., & **Ye, X**. Evaluation of high-tech industry innovation performance using a new two-stage network DEA Model. International Conference on Applied Social Science and Computational Science.

2020   **Ye, X**. Building relatively small settlements' capability for disaster response by a human dynamics based crowd-sourced real-time information sharing system. SUS-RURI: Proceedings of a workshop on developing a convergence sustainable urban systems agenda for redesigning the urban-rural interface along the Mississippi River watershed.

Passe, Ulrike, Janette Thompson, and Kimberly Zarecor, (Eds.): 2020. Ames, Iowa, August 12–13, 2019. Ames, Iowa: Iowa State University Digital Press. https://doi.org/10.31274/isudp.35.

2019   Al-Dohuki, S., Kamw, F., Zhao, Y., **Ye, X**., Yang, J., & Jamonnak, S. An open source TrajAnalytics software for modeling, transformation and visualization of urban trajectory data. In 2019 IEEE Intelligent Transportation Systems Conference (ITSC), pp. 150-155. (IEEE)

2019   Chen, Y., & **Ye, X.**[*] Online community conflict decomposition with pseudo spatial permutation, proceedings of the 8th International Conference on Computational Data and Social Networks. A. Tagarelli and H. Tong (Eds.): CSoNet 2019, LNCS 11917, pp. 1–10.

2019   Chen, Z., & **Ye, X.**[*] Modelling spatial information diffusion, In: Cherifi H., Gaito S., Mendes J., Moro E., Rocha L. (Eds.) Complex Networks and Their Applications VIII. Complex Networks. Studies in Computational Intelligence, vol 881. Springer, Cham.

2019   Liu, W., **Ye, X.**[*], Phan , H., & Hu, H. Scalable self-taught deep-embedded learning framework for drug abuse behaviors detection with spatial effects (Short Paper), Proceedings of the 8th International Conference on Computational Data and Social Networks. A. Tagarelli and H. Tong (Eds.): CSoNet 2019, LNCS 11917, pp. 1–10.

2019   Hu, H., Phan, H., **Ye, X**., Jin, R., Dou, D., Ding K., & Vo, H. Drugtracker: A community-focused drug abuse monitoring and supporting system using social media and geospatial data (demo paper). In *Proceedings of the 27th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems* (pp. 564-567).

2019   Kamw, F., Al-Dohuki, S., Zhao, Y., Yang, J., **Ye, X**., & Chen, W. Visually analyzing latent accessibility clusters of urban POIs. EuroVA Workshop on Visual Analytics. C. Turkay and T. von Landesberger (Eds.).

2018   Jiang, Y. Li, Z., & **Ye, X**. Measuring inter-city network using digital footprints from Twitter users. Proceedings of the 2018 ACM SIGSPATIAL International Workshop on PredictGIS.

2017   Zhai, S., Song, G., **Ye, X**., Yu, F., & He, N. Assessment of drought occurrence in Bei-bu wheat districts, China between 1960 and 2012. In Geoinformatics, 2017 25th International Conference, pp. 1-5. (IEEE)

2017   Hu, T., **Ye, X**., Duan, L., & Zhu, X. Integrating near repeat and social network approaches to analyze crime patterns. In Geoinformatics, 2017 25th International Conference, pp. 1-4. (IEEE)

2017   Chen, N., Chen, Y., Blasch, E., Ling, H., Uou, Y., and **Ye, X**. Enabling smart urban surveillance at the edge. (IEEE SmartCloud).

2016   Chen, N., Chen, Y., Song, S., Huang, C. T., & **Ye, X**. Smart urban surveillance using fog computing. In Edge Computing (SEC), IEEE/ACM Symposium, pp. 95-96. (IEEE)

2016   Zhao, Y., Al-Dohuki, S., Eynon, T., Kamw, F., Sheets, D., Ma, C., Hu, Y., **Ye, X**., & Yang, J. TrajAnalytics: A web-based visual analytics software of urban trajectory data. IEEE Workshop on Visualization in Practice: Open Source Visualization and Visual Analytics Software, IEEE Visualization Conference 2016, Baltimore.

2016   **Ye, X**. Open source geographical social network toolkit. Proceedings of the Third International Conference on CyberGIS and Geospatial Data Science.

2014   **Ye, X**., & Yue, W. Comparative analysis of regional development: Exploratory space-time data analysis and open source implementation. Economics, No 2014-20, Kiel Institute for the World Economy.

2013   Gu, Y., Smith, A., Lee, J., **Ye, X**., and Kim, S. Effective visualization tool for job searching. Proceedings of the 2013 Int'l Conf. on Modeling, Simulation and Visualization Methods (MSV'13).

2011   **Ye, X**., & Carroll, M. Warn notice toolbox: Open-source geovisualization of large lay-off events. Proceedings of GeoInformatics.

2011   Li, R., Wang, R., & **Ye, X.**[*] Forest form mapping system for managing forest resource: Design and implementation. Proceedings of GeoInformatics.

2011   Li, Y., Huang, C., & **Ye, X.**[*] Analyzing and planning rural ecosystem and environment in high-resolution remote sensing and GIS environment: A case study of the beautiful countryside. Proceedings of GeoInformatics.

2007   Rey, S. J., & **Ye, X.**[*] Spatial dynamics in city size distribution. Proceedings of the 2nd ICA Workshop on Geospatial Analysis and Modeling (Spatial Structure and Dynamics of Urban Environments).

2007   Xie, Y. and **Ye, X**, (2007) Multi-category Tempo-Spatial Pattern Analysis (McTSPA). Proceedings of Geocomputation.

2006   **Ye, X**. Spatializing Zipf's Law in the dynamic context: US Cities 1960-2000. UCGIS Summer Assembly Proceedings.

2005   **Ye, X**., Xie, Y., & Batty, M. Modeling transition rules in urban cellular automata. Proceedings of Geocomputation.

2004   Xie, Y., & **Ye, X**. Comparative analysis of spatial pattern changes: CASP. Proceedings of GIScience.

Book Reviews

2012   **Ye, X**. Education and Inequality across Europe. By Dolton, P., Asplund, R., and Barth, E. *Review of Social Economy*, 70(4): 527-531. Cheltenham.

2011   **Ye, X**. Portfolios of the Poor: How the World's Poor Live on $2 a Day. By Collins, D., Morduch, J., Rutherford, S., and Ruthven, O. *Review of Social Economy*, 69(3): 409-411.

2011   **Ye, X**. Knowledge Discovery in Spatial Data. By Leung, Y. *Regional Studies*, 45(6): 872-873.

2011   **Ye, X**. New Directions in Regional Economic Development. Edited by Karlsson, C., Andersson, A. E., Cheshire, P.C., and Stough, R. R. *Regional Studies*, 45(4): 560-561.

2008   **Ye, X**. Human Geography. Edited by de Blij *et al*. *Regional Studies*, 1: 156-157.

2008   **Ye, X**. Learning from Clusters: an Economic-Geographic Perspective. Edited by Boschma and Kloosterman. *Regional Studies*, 1: 149-150.

2007   **Ye, X**. Geography in America at the Dawn of the 21st Century. Edited by Gaile, G. L. and Willmott, C. J. *Regional Studies*, 3: 416-417.

2006   **Ye, X**. The Urban Geography Reader. Edited by Fyfe, N. R. and Kenny, J. T. *Regional Studies*, 3: 425-426.

2005   **Ye, X**. China and the WTO: Accession, Policy Reform, and Poverty Reduction Strategies. By World Bank. *Regional Studies*, 5: 676-677.

Reports

2025   Pi, Y., Pillai, A., Li, S., Hackney, A., Dulam, R. V. S., Vysyaraju, U., Wooley, J., Negassi, I., Ye, Y., Retchless, D., Bai, W., Du, J., Ye, X., & Duffield, N. Rapid damage estimation through social media content with geolocation using natural language processing: A study of historical Texas tropical storms. SSRN. https://doi.org/10.2139/ssrn.5400380

2025   Thomasson, J. A., Ampatzidis, I., Bhandari, M., Ferreyra, A., Gentimis, T., McReynolds, E., Murray, S. C., Peterson, M. B., Rodriguez Lopez, C., Strong, R. L., Tedeschi, L. O., Vitale, J., & **Ye, X**. AI in agriculture: Opportunities, challenges, and recommendations. The Council for Agricultural Science and Technology. https://cast-science.org/wp-content/uploads/2025/03/CAST_AI-in-Agriculture.pdf

2023   Foundational Research Gaps and Future Directions for Digital Twins National Academies of Sciences, Engineering, and Medicine. 2023. Washington, DC: The National Academies Press. https://doi.org/10.17226/26894

2023   Opportunities and Challenges for Digital Twins in Atmospheric and Climate Sciences: Proceedings of a Workshop—in Brief. National Academies of Sciences, Engineering, and Medicine. 2023. Washington, DC: The National Academies Press. https://doi.org/10.17226/26921.

2023   Kijewski-Correa, T., Ono, Y., Balachandran, B., Bukvic, A., Fox, N., Holtzer, G., Lachlan, K., Little, J., Mas, E., Nishikawa, S., Shimizu, M., Stephens, K., Tatano, H., Tatsuki, S., Toyofuku, K., Wang, H., & **Ye, X**. US-Japan workshop on needs, priorities and partnerships to advance human-centered data for resilience. DesignSafe-CI. doi: 10.17603/Ds2-Aev9-3685

2022   Lovell, R., Klingenstein, J., Du, J., Overman, L., Sabo, D., Flannery, D., & **Ye, X**. NIJ Report on "Using Sentiment Analysis and Topic Modeling in Assessing the Impact of Police Signaling on Investigative and Prosecutorial Outcomes in Sexual Assault Reports"

2022   Kar, B., Mohebbi, S., Fu, G., **Ye, X**., & Omitaomu, O. A. ARIC 2021 Workshop Report: The 4th ACM SIGSPATIAL International Workshop on Advances in Resilient and Intelligent Cities: Virtual, Online, USA-November 2, 2021. SIGSPATIAL Special, 13(1-3), 11-14.

2018   **Ye, X**. Real-Time Urban Surveillance System and Smart City, Urban Infill, Cleveland Urban Design Collaborative.

2013   Curtis, A., Baker, S., **Ye, X**., Curtis, J.W., & Floyd, G. A. Fine-Scale Spatial Analysis of Spatial Video Collected Damage Data for the Newcastle-Moore Tornado of May 21, 2013, Quick Response Research Report, University of Colorado Natural Hazards Center, Boulder, CO.

2006   **Ye, X**., Stephens, P., Pattaniak, S., Li, X., Elias, M., & Janikas, M. Subject and Author Indexes to 2005 Regional Science and Related Journal Literature. *International Regional Science Review*, 29(4).

INVITED TALKS

2025   **Ye, X.** Urban Digital Twins for Community Resilience. NSF Urban Digital Workshop at University of Texas-Austion. April.

2025   **Ye, X.** Urban AI: Driving Innovation for Sustainable and Resilient Cities. 2025 CMIS (The Council for the Management of Information Systems) AI Conference – "Thriving in an AI World" hosted by Texas A&M University's Mays Business School. February.

2024   **Ye, X.** The Role of AI in Hazard Mitigation. NALEO (National Association of Latino Elected and Appointed Officials) Policy Institute on Emergency Preparedness. September.

2024   **Ye, X.** 3D Visualization of Hurricane Storm Surge Impacts and Flood Mitigation in

Coastal Texas. <u>Lawrence Berkeley National Laboratory</u>. July.

2024   **Ye, X.** Urban Digital Twins. <u>Louisiana State University Coastal Sustainability Studio</u>. July.

2024   **Ye, X.** Generative AI and GIScience, Harvard CGA conference on GeoAI and Digital Twins. <u>Harvard University</u>. May.

2023   **Ye, X.** Revolutionizing Urban Planning and Design: Harnessing the Power of Generative AI. Good Systems for Smart City Symposium, <u>The University of Texas at Austin</u>, September.

2023   **Ye, X.** Utilizing Deep Learning and Google Street View to Analyze Flood Mitigation. <u>The Symposium on Spatiotemporal Data Science, Harvard University</u>, July.

2023   **Ye, X.** Unlocking the Secrets of Long-Term City Park Visitation: Insights from Smartphone User Mobility Data. <u>Stanford Woods Institute for the Environment, Stanford University</u>, May.

2023   **Ye, X.** Why Spatial Data Science, Geospatial Machine Learning, and Urban (or Regional) Digital Twin Matter? <u>Workshop on Tornado Hazard Impact Reduction, Texas Tech University</u>. April.

2022   **Ye, X.** Urban Artificial Intelligence: Practice and Prospects, <u>Department of Environmental Planning, Seoul National University</u>. October.

2022   **Ye, X.** Urban Flooding Analytics, Panel on Resiliency, "Living with Climate Change: Perspectives from the Humanities and Beyond" organized by <u>the American Philosophical Society</u>, Philadelphia, September.

2022   **Ye, X.** Design & Analytics System based on Urban Artificial Intelligence, <u>Smart City Talk Series, UT-Austin</u>, September.

2022   **Ye, X.** Open Urban Science (Keynote). <u>International Conference on Data Science and Information System in association with IEEE Bangalore Section, IEEE Mysore Subsection, IEEE Computer Society Bangalore Chapter and IEEE Information Theory Society Bangalore Chapter</u>, July.

2022   **Ye, X.** (co-presenter) Free Knowledge: How Open Education Resources are both student-centered and value added for programs. <u>Texas A&M University Monthly Faculty Conversation Café</u>. May.

2022   **Ye, X**. Computational Urban Science, <u>Department of Urban and Regional Planning, University of Illinois at Urbana Champaign</u>. April.

2022   **Ye, X**. Urban Informatics: Where Urban Planning Meets Computer Science, <u>Department

of Computer Science, University of Nevada, Las Vegas. February.

2022   **Ye, X**. An Intelligent Visual Discovery Mapping Platform for Massive Heterogeneous Datasets (Keynote), Safe-D webinar series (Department of Transportation). January.

2021   **Ye, X**. GIS-KG: building a large-scale hierarchical knowledge graph for geographic information science, International Conference of Social Computing. December.

2021   **Ye, X**. Integrating Computer Vision and Geospatial Technologies for Urban Sustainability, Department of Earth and Planetary Sciences, The University of Texas at San Antonio, November.

2021   **Ye, X**. Spatial Decision Support for Open Knowledge Networking, Water, Climate & Environment Seminar, University of Texas at Austin. December.

2021   **Ye, X**. AI-driven Framework for Urban Flood Resilience Geodesign (Keynote), Urban China Forum, Columbia University Graduate School of Architecture, Preservation and Planning. November.

2021   **Ye, X.** Sidewalk Extraction Using Aerial and Street View Images. Texas A&M Institute of Data Science Seminar. February.

2020   **Ye, X**. Network, Flow, and Human Dynamics, International Conference of Social Computing. December.

2020   **Ye, X**. Human-centered Urban Informatics for Disaster Response, Second Workshop on AI for Humanitarian Assistance and Disaster Response, NeurIPS 2020. December.

2020   **Ye, X**. Human Dynamics in Smart Cities, Great Problems Great Minds Seminar Series, Illinois Institute of Technology. November.

2020   **Ye, X**. Understanding Public Health in Physical, Virtual, and Perceived Worlds, School of Public Health, Texas A&M University. October.

2020   **Ye, X**. Automating Sidewalk Inventory Creation, Kinder Research Seminar, Rice University, October.

2020   **Ye, X.** Human Dynamics and Computational Urban Science, Department of Computer Science & Engineering Seminar, Texas A&M University. September.

2020   **Ye, X.** GIS Analysis of Communication and Mobility during COVID-19, School of Public Health, The University of Texas Health Science Center at Houston. September.

2020   **Ye, X.** Towards Human Dynamics based Urban Informatics, Department of Geography Seminar, Texas A&M University. September.

2020   **Ye, X.** Interactive Intelligent Data Finder, Dataverse Annual Meeting, <u>Harvard University</u>. June.

2019   **Ye, X.** Urban Visual Analytics, International Geoinformatics Week, <u>Guangzhou, China</u>. November.

2019   **Ye, X.** Human Mobility Visual Analytics, GIS Day, <u>East Stroudsburg University</u>. November.

2019   **Ye, X**. Visually Exploring Massive Urban Trajectories to Enhance Urban Sustainability and Resilience, Department of Civil and Urban Engineering, <u>New York University.</u> October.

2019   **Ye, X**. GIS Modelling of Urban Public Health: Fine-scale Space-time Hotspots Identification and Simulation, School of Public Health, <u>Rutgers, the State University of New Jersey,</u> May.

2019   **Ye, X**. Web-based Social Media Analytics, IEEE SMC Chapter seminar, <u>New Jersey Institute of Technology.</u> March.

2018   **Ye, X**. Human Dynamics in Spatial-Social Network, Bloustein School of Planning and Public Policy, <u>Rutgers, the State University of New Jersey.</u> December.

2018   **Ye, X**. Network, Flow, and Urban Informatics, Data Science Summit, <u>Pitney Bowes Incorporated</u>. December.

2018   **Ye, X**. Analyzing Flow and Network, Keynote, National Forum in Geoinformatics, <u>Lanzhou Jiaotong University</u>. July.

2018   **Ye, X**. Big Flow Data Visual Analytics through TrajAnalytics, Illuminating Space and Time in Data Science Conference, <u>Harvard University</u>. April.

2018   **Ye, X**. Spatiotemporal Analysis of Housing Prices in China, Center for Geographic Analysis, <u>Harvard University</u>. March.

2018   **Ye, X**. Human Dynamics in the Urban Environments, Dept. of Electrical Engineering, <u>University of North Texas</u>. March.

2018   **Ye, X**. Inferring Urban Air Quality Based on Social Media, Dept. of Computer Science, <u>Kent State University</u>. February.

2017   **Ye, X**. Modelling Network and Flow Using Big Data in an Interdisciplinary Context. <u>University of Toronto</u>, November.

2017   **Ye, X**. A Framework of Social Media Analytics for Wildfire Hazards, Center for Geographic Analysis, <u>Harvard University</u>. February.

2016   **Ye, X**. Visualizing and Modeling Big Social Data in China, Center on Religion and Chinese Society, <u>Purdue University</u>. September.

2015   **Ye, X**. Open GIS, Keynote, <u>Columbia University</u>. November.

2015   **Ye, X**. Space, Time, and Human Dynamics, Keynote, GIS Open House Day, <u>Binghamton University</u>. November.

2015   **Ye, X**. Urban Computing, Research Seminar Series of Electrical & Computer Engineering, <u>Binghamton University</u>. November.

2015   **Ye, X**. Space, Time, and Network, <u>Cornell University</u>. September.

2015   **Ye, X**. Open-source Comparative Space-Time Dynamics, Keynote, <u>R conference</u>, Beijing, June.

2013   **Ye, X**. Comparative Space-Time Dynamics. Sol Price School of Public Policy, <u>University of Southern California</u>. March.

2012   **Ye, X**. Urban Modeling. <u>National Institute for Environmental Studies (NIES), Japan</u>, June.

2012   **Ye, X**. Open Source Space-Time Analysis. Center for Global Change and Earth Observations, <u>Michigan State University</u>. May.

2011   **Ye, X**. Comparative Space-Time Dynamics and Spatial Intelligence for Regional Analysis. The First All-hands Meeting of the NSF CyberGIS Project, <u>Oak Ridge National Laboratory</u>. September.

2011   **Ye, X**. Comparative Space Time Dynamics of Idea Diffusion. <u>NSF Funded Specialist Meeting ("Mapping Ideas: Discovering and Information Landscapes")</u>. San Diego. June.

2011   **Ye, X**. Comparative Space Time Dynamics: Toolbox Development. <u>NSF Setgo Summer Research Meeting</u>. Bowling Green State University. June.

2011   **Ye, X**. ESDA and Spatial Panel Approaches. <u>NIH Center for Family & Demographic Research</u>, Bowling Green State University, January.

2010   **Ye, X**. An Open-source Toolbox for Cluster-based Economic Development. <u>Space-Time Modeling and Analysis Workshop, Redlands</u>. February.

CONFERENCE PRESENTATIONS

2025   **Ye, X.** & Wu, L. "AI-Enhanced Mobility Analytics for Crime Resilience: A Fine-Scale Study of Population Flow and Crime Patterns in Houston", AI and Cities: An

International Forum for Innovation and Collaboration. University of Florida, May.

2025   Wu, L. & **Ye, X.** "Unraveling Disaster Impacts and Recovery: Social Vulnerability, Risk Perceptions, and Modeling of Infrastructure", AAG, Detroit, April.

2025   **Ye, X**. Panelist, "The National Academy Study", "Digital Twins: A New Paradigm of Digital Transformation to Fill the Last Gap of Making Your Research Count" Plenary Session, AAG, Detroit, April.

2025   **Ye, X.** & Wu, L. "Integrating Human Dynamics into AI-Driven GeoDesign for Sustainable Urban Futures", The 1st Workshop on AI for Urban Planning, The 39th Annual AAAI Conference on Artificial Intelligence. Philadelphia, March.

2025   **Ye, X.** "Simulating the Impact of Compound Flood Risks on Coastal Land Use Patterns", Climate Health Frontiers AI and Data for Mitigation, Adaptation, and Resilience Symposium, Houston, January.

2024   **Ye, X**. "Visualizing Urban Storm Flood Impacts in Coastal Texas", Texas Coastal Resilience & Adaptation Conference, Virtual, September.

2024   **Ye, X**. Panelist, "Digital Twin and Spatiotemporal Data Science", The Symposium on Spatiotemporal Data Science: GeoAI for Social Sciences, Washington DC, July.

2024   **Ye, X**. "Affiliate Lab Program: Spatial Data Lab: Platform and Network for Spatiotemporal Data Science", The Symposium on Spatiotemporal Data Science: GeoAI for Social Sciences, Washington DC, July.

2024   **Ye, X**. "Promoting Urban Informatics Plus: Practices and Strategies", The Symposium on Spatiotemporal Data Science: GeoAI for Social Sciences, Washington DC, July.

2024   Wu, L. & **Ye, X**. "Assessing the Risk of Cyber Victimization in a Physical-Digital Environment", AAG, Honolulu, April.

2024   Li, W., Chen, A., Ory, M., Bain, J., Usman, M., **Ye, X**., Dadashova, B., Li, X., Sun, Q., Li, M. "The Benefits of On-Demand Transit for Older Adults and People with Disabilities in Rural America – A Natural Experiment Study in Nolanville, Texas", TRB Annual Meeting, Washington, DC, January.

2024   Zhu, C., Dadashova, B., Lee, C., **Ye, X**., Charles T. Brown, C., "Disparities in Roadway Safety: Exploring Direct and Indirect Pathways Contributing to Disparities in Non-Motorist Crashes in Houston, Texas", TRB Annual Meeting, Washington, DC, January.

2023   **Ye, X.** "Human-centered Urban Digital Twins: Toward a Research Agenda". the 17th IACP Annual Conference, Tianjin, June.

2023   **Ye, X.** "Modeling the driving forces of park visitations using smartphone user mobility".

AAG, Denver, March.

2023   **Ye, X.** Cities, Regions, Hybrid World, and COVID-19, Panel discussion for "Regional Development and Planning Specialty G Signature Panel", AAG, Denver, March.

2023   **Ye, X.** Urban Digital Twin, Panel discussion for "Digital Twins and Geographical Innovation", AAG, Denver, March.

2022   Cai, Z., Newman, G., Li, D., Chiu, W., **Ye, X** & Retchless, D. "Assessing Future Flood Risk Reduction through Combining Digital Twin Models with Landscape Performance and Urban Analytics." 35th Annual National Institutes of Environmental Health Sciences Annual Superfund Conference- Raleigh, NC.

2022   Gibson, C., Dawkins, M., & **Ye, X**. "A Socio-Ecological Examination of Crime in Houston, Texas", ASC (The American Society of Criminology) Annual Meeting, Atlanta, November.

2022   Niyogi, D. & **Ye, X.** "Introducing Urban Digital Twins (UrbDT)", The International Association for Urban Climate Virtual Poster Conference, August.

2022   **Ye, X.** "Computational Urban Science: A Research Agenda", Planet Texas 2050 Research Symposium, Virtual, April.

2022   **Ye, X.** "Towards an AI-driven Framework for Multi-scale Urban Flood Resilience Planning and Design", AAG, Virtual, February.

2021   **Ye, X**. "AI for Urban Flood Resilience Planning", Disaster PRIMR 2021. Virtual, February.

2021   Han, Y & **Ye, X**. "Integrating social-physical-natural systems in community flood risk mitigation using agent-based modeling", ACSP (Association of Collegiate Schools of Planning). Virtual, November.

2020   **Ye, X**. "Open Knowledge Network for Spatial Decision Support towards Urban Sustainability", ACSP. Virtual, November.

2020   **Ye, X.** "Human Dynamics and Urban Sustainability", Superfund Research Center monthly meeting. Texas A&M University. Virtual, September.

2020   Ning, H., **Ye, X.,** Chen, Z., & Cao, T. "Sidewalk Extraction Integrating Aerial Imagery and Street View Imagery", AAG. Virtual, April.

2020   Du, J., & **Ye, X.** "Interactive Visual Analytics for Sparse Trajectory Data", AAG. Virtual, April.

2019   Chen, Z., & **Ye, X.*** "Modelling Spatial Information Diffusion", The 8th International

Conference on Complex Networks and their Applications. Lisbon, Portugal, December.

2019   Chen, Y., & **Ye, X.*** "Online Community Conflict Decomposition with Pseudo Spatial Permutation", The 8th International Conference on Computational Data and Social Networks. Ho Chi Minh City, Vietnam, November.

2019   Liu, W., **Ye, X.*,** Phan , H., & Hu, H. "Scalable Self-Taught Deep-embedded Learning Framework for Drug Abuse Behaviors Detection with Spatial Effects", The 8th International Conference on Computational Data and Social Networks. Ho Chi Minh City, Vietnam, November.

2019   **Ye, X**., Turner, K., She, B. "Automating Parcel Classification for Land Management", AAG. Washington DC, April.

2019   **Ye, X**. Panelist, "Data Science in Geography?", AAG. Washington DC, April.

2018   **Ye, X**. "Human Dynamics in the Data Challenged Environments", The 26th International Conference on Geoinformatics. Kunming, June.

2018   **Ye, X**. Panelist, "Setting the Research Agenda for the Geospatial Analysis and Modeling (GAM) Commission of the ICA", AAG. New Orleans, April.

2018   **Ye, X**. Panelist, "Spatiotemporal Symposium: Social Sensing and Big Data Computing for Disaster Management". AAG, New Orleans, April.

2018   Chen, H., Cheng, T., & **Ye, X**. "A Police Districting Problem on Street Network", AAG. New Orleans, April.

2018   **Ye, X**., & Wei, X. "How Geopolitical Environment Impacts People's Perception of El Nino", AAG. New Orleans, April.

2018   **Ye, X**., Duan, L., Hu, T., & Zhu, X. "Data sparsity, spatiotemporal semantics, and suspect mobility prediction". AAG, New Orleans, April.

2018   Liu, Q., **Ye, X**., & Lee, J. "Evaluation of the Attractiveness of Point-of-Interests to Tourists", AAG. New Orleans, April.

2018   Wang, Z., **Ye, X**., & Lee, J. "A Spatial Econometric Modeling of Online Social Interactions Using Microblogs", AAG. New Orleans, April.

2018   Dong, W., & **Ye, X**. "Spatial Indicators of Topics in Social Media", AAG. New Orleans, April.

2018   Sharag-Eldin, A., **Ye, X**., & Sharag-Eldin, A. "Analyzing the Death Penalty as an indicator of the Moral Policy Debate on Twitter", AAG. New Orleans, April.

2017   **Ye, X**., & Wei, X. "How People Perceived El Nino on Twitter", Applied Geography Conference. Kent, November.

2017   **Ye, X**., She, B., & Bao, S. "A Framework of Social Media Data and Census Data Fusion", Applied Geography Conference. Kent, November.

2017   **Ye, X**. "A Visual Analytics Framework for Comparative Urban Trajectory Analysis", The 25th International Conference on Geoinformatics. Buffalo, August.

2017   Wu, L., & **Ye, X**. "Comparative Analysis of Urban Crimes in China and USA", International Symposium of Spatially Integrated Social Science and Humanities. Nanjing. June.

2017   Wu, L., & **Ye, X**., "Spatial Social Network Crime Analysis", International Symposium of Spatial Data Science. Beijing. June.

2017   Wu, L., & **Ye, X**. "Spatiotemporal Crime Analytics", International Symposium of Crime Analysis. Hangzhou. July.

2017   Liu, Q., Wang, Z., & **Ye, X**. "Delineating the human movement pattern: A geo-big data perspective". Graduate Research Symposium. Kent State University, April.

2017   Lin, H., & **Ye, X**. "Socioeconomic and Spatial Pattern of Local Communities with Their Responses to Wildfire Using Twitter Data". Graduate Research Symposium. Kent State University, April.

2017   Dong, W., & **Ye, X**. "Who Win the Online Debate? Exploring People behind Social Media". Graduate Research Symposium. Kent State University, April.

2017   **Ye, X**., Dang, L., & Lee, J. "A Framework of Spatial Social Network Analytics", AAG. Boston, April.

2017   **Ye, X**. "Spatiotemporal analytics on Smart Cities", AAG Spatiotemporal Panel session, AAG. Boston, April.

2017   Li, S., **Ye, X**. "Urban Shrinking in China: A Review", AAG. Boston, April.

2017   Wang, Z., **Ye, X**., Chang, X., "Geography and Cyberspace: Understanding Online Human Interactions from Big Geosocial Data", AAG. Boston, April.

2017   Liu, Q., Wang, Z., **& Ye, X**. "An Exploratory Study of Urban Human Mobility: A Big Data Perspective", AAG. Boston, April.

2017   Dong, W., **& Ye, X**. "Who Win the Online Debate? Exploring People behind Social Media", AAG. Boston, April.

2017   Lin, H., **& Ye, X**., "Using Twitter to Examine the Relationship between the Socioeconomic, Land-use and Demographics of Local Communities, and Their Responses to Wildfire Disasters", AAG. Boston, April.

2017   Sharag-Eldin, A., **Ye, X**., & Spitzberg, B., "Analyzing the Role of Actors", AAG. Boston, April.

2017   Dang, L., Chen, Z., Lee, J., & **Ye, X**. "An Agent-Based Simulator for Information Diffusion Over Social Network", AAG. Boston, April.

2016   **Ye, X**. "Comparative Space-time Research Questions for Open Source Toolkit Development", International Geographical Congress. Beijing, August.

2016   **Ye, X**. "Spatiotemporal Modelling and Simulation of Meme Diffusion Processes", the 10th International Association for China Planning Conference. Beijing, July.

2016   Adiyana Sharag-Eldin, A. **Ye, X**., & Spitzberg, B. "Analyzing Public Opinions on Fracking using Twitter", AAG. San Francisco, April.

2016   **Ye, X**. "Regions aren't just Regional: Global Roundtable", AAG. San Francisco, April.

2016   Wang, S., **Ye, X**., and *et al*. "Virtual Geographic Scene based Surveillance Video Synopsis", AAG. San Francisco, April.

2015   Lai, C.-H., **Ye, X**., & She, B. "A Mixed-Mode View of The Evolutionary Dynamics Of Humanitarian Organizing Networks: Integration of Bona Fide Networks, Media Multiplexity, and Affordances". the 65th annual conference of International Communication Association. San Juan, Puerto Rico.

2015   Lai, C.-H, **Ye, X**., She, B., & Tao, C. C. "A Longitudinal Investigation of Technological Affordances for Humanitarian Organizing". the 65th annual conference of International Communication Association. San Juan, Puerto Rico.

2015   Fu, C., Rowan, C., & **Ye, X**. "Measuring Similarity between Calculated Paleomagnetic APWPs and the Fixed Hotspot Model Predicted", AGU. San Francisco, December.

2015   Li, E. Wang, W., **Ye, X**., & Xu, Y. "The Formation and Evolution of China's Agricultural Knowledge Network for Science and Technology (CAKNST)", Regional Studies Association China Conference. Hangzhou, November.

2015   **Ye, X.,** & Wu, L. "Accounting for Spatiotemporal Inhomogeneity of Urban Crime in China", Applied Geography Conference. San Antonio, November.

2015   Li, Q., & **Ye, X**. "Measuring and Analyzing the Mixed Land Use of Shenzhen: 2009-2012", AAG East Lake. Kent, October.

2015   Liu, Q., Wu, L., **Ye, X.,** & Tsou, M. "Detecting spatial patterns of controversial topics online: a case study of death penalty topic on Twitter", AAG East Lake. Kent, October.

2015   **Ye, X**. "Urban Transportation Visual Analytics". Wuhan University, October.

2015   **Ye, X**. "Advances in Spatiotemporally Integrated Social Sciences". Huazhong University of Science and Technology, October.

2015   **Ye, X**. "Space, Time, and Urban Analytics". Tongji University, October.

2015   **Ye, X**. Science Showcase of Spatiotemporal Network (invitation to the groundbreaking for the new Integrated Science Building), Kent State University, October.

2015   **Ye, X**., Li, S., & Lee, J. "Analyzing Ebola Fear in China", 23rd International Conference on Geoinformatics, 2015, Wuhan, June.

2015   **Ye, X.** "Space-Time and Content Analysis of Dengue Fever", International Symposium of Spatially Integrated Social Science and Humanities, Wuhan, June.

2015   **Ye, X.** "Analyzing Shooting on the Tweets", AAG. Chicago, April.

2014   **Ye, X**., Lai, C., & She, B. "A Framework of Mapping Social Connections in Space and Time", Regional Science Association International. Washington DC, November.

2014   **Ye, X**. "A Tale of Two Provinces: Comparative Space-Time Analysis and Modeling of Economic Disparity between Coastal and Inland China", Regional Science Association International. Washington DC, November.

2014   Bao, S., She, B., & **Ye, X**. "Spatial Intelligence Analysis with Geo-Explorers and PySAL", Regional Science Association International. Washington DC, November.

2014   **Ye, X**. "Comparative Space-Time Analysis and Implementation: Towards Spatiotemporally Integrated Policy-relevant Research", School of Library and Information Science. Kent State University, November.

2014   **Ye, X**. "Space-Time Crime Analysis". Department of Criminal Justice, University of Toledo, October.

2014   **Ye, X**. "Comparative Space-Time Analysis of Crime in Wuhan, China", The Race, Ethnicity and Place Conference. Fort Worth, October.

2014   **Ye, X**. "Space-Time Interaction of Residential Burglaries in a Large Chinese City", Applied Geography Conference, Atlanta, October.

2014   **Ye, X**. "Open Source Point Process Modeling of Earthquake", 2nd Annual International Conference on Geo-Informatics in Resource Management & Sustainable Ecosystem,

Ypsilanti, October.

2014 **Ye, X**. "Space-Time Modeling of Urban Crime". International Crime Geography Conference, Guangzhou, June.

2014 **Ye, X**. "Spatial Social Science". International Symposium of Spatially Integrated Social Science and Humanities, Beijing, June.

2014 **Ye, X**. "Big Social Data". Zhejiang University, June.

2014 **Ye, X**. "Comparative Space Time Dynamics", AAG Spatiotemporal Panel session, AAG. Tampa, April.

2014 **Ye, X**. "Comparative Space-Time Path of Regional Economic Development", The 3rd International Workshop on Regional, Urban, and Spatial Economics. Shanghai, June.

2014 **Ye, X**. "What Are We 'Tweeting' about Black Friday?", AAG. Tampa, April.

2014 Zhou, X., **Ye, X**., Kaplan, D. "Understanding Urban Issues in China and the USA through A Comparison of Urban Geography Textbooks", AAG. Tampa, April.

2014 **Ye, X**. "Open Source Space-Time Analysis", pre-AAG workshop on open GIS, Tampa, April.

2013 **Ye, X**. "Weighted Network Voronoi and Urban Streets", Western Regional Science Association. San Diego, February.

2013 **Ye, X**. "Zipf's Law and Urban Dynamic in China: 1960-2010", Regional Science Association International. Atlanta, November.

2013 **Ye, X**. "Comparative Space-Time Analysis", The First International Conference on Environment, Legacy, and Urban Planning. Hangzhou, November.

2013 **Ye, X**. "Spatial Rank and Spatial Markov for Urban Size Distribution in China", Joint Annual Meeting ELDAAG/CAGONT. Toledo, October.

2013 Zhou, X., **Ye, X**., Liu, H., & Han, L. "Analysis on Urban Land Use Efficiency in China", Joint Annual Meeting ELDAAG/CAGONT. Toledo, October.

2013 **Ye, X**., & Li, W. "Mapping the Pulse of Shopping Behavior: Black Friday, Economic Geography, and Cyberspace", The All Hands Meeting of the NSF CyberGIS project, Seattle, September.

2013 **Ye, X**. "Comparative Space-Time Analysis of Regional Development across Scales: Case of Zhejiang and China", The Second International Workshop on Regional, Urban, and Spatial Economics. Beijing, June.

2013   **Ye, X**. "Frontiers and Roadmaps: Academic Viewpoints", CyberGIS Symposium, AAG. Los Angeles, April.

2012   **Ye, X**., Carroll, M., & Wu, L. "Visualizing and Detecting Space-Time Chain", Regional Science Association International. Ottawa, Canada, November.

2012   Carroll, M., & **Ye, X**. "Comparative Space-Time Analysis of Warn Notices", Regional Science Association International. Ottawa, Canada, November.

2012   Qian, H., & **Ye, X**. "Spatiotemporal Dynamics of High Technology Entrepreneurship: A Comparison of California and New England (1999-2006)", Regional Science Association International, Ottawa, Canada, November.

2012   Burek, M. W., Stinson, P. M., & **Ye, X**. "Spatial Significance and Welfare Reforms: How Changes from AFDC to TANF Affected Occurrences of Part Two Crimes", Annual Meeting of Midwestern Criminal Justice Association. Chicago, September.

2012   **Ye, X**., Carroll, M., & Wu, L. "Measuring Scales of Space-Time Interaction among Crime Events", GeoInformatics. Hong Kong, June.

2012   Burek, M. W., Stinson, P. M., & **Ye, X**. "Before and After Welfare Reform: Geospatial Analysis of Its Impact on Crime 1980-2010", Annual Meeting of Academy of Criminal Justice Sciences. New York, March.

2012   Yue, Y., Zhao, J., Wang, J., Yin, Y., **Ye, X**., & Huang, X. "Vulnerability Assessment of Cotton to Hail in China Based on Historical Records, Field Investigation and Ground Experiments", 4th International Disaster and Risk Conference IDRC. Davos, Switzerland, August.

2012   **Ye, X**., He, C., & Pan, F. "Modeling Industrial Air Pollution in Transitional China: Exploratory Space-Time Analytical Perspective and Toolbox Implementation", AAG. New York, February.

2012   **Ye, X**. "Comparative Analysis of Regional Economic Development", Western Regional Science Association, Hawaii, February.

2011   **Ye, X**., Bao, S., & She, B. "The Spatial Intelligence for Regional Analysis", Regional Science Association International. Miami, November.

2011   Carroll, M., & **Ye, X**. "Publication Patterns and Trends in Economic Development Research: Information Visualization Approach", Regional Science Association International. Miami, November.

2011   **Ye, X**., & Carroll, M. "Visualizing Worker Flow in an Interactive and Exploratory Framework", Annual Meeting of AAG Eastlake Division. Youngstown, October.

2011   **Ye, X**., & Carroll, M. "Visualizing Local Economic Development: A Comparative Space-Time Data Analysis", Annual Meeting of Ohio Association of Economists and Political Scientists. Bowling Green, October.

2011   Reid, N., Carroll, M., & **Ye, X**. "Spatial and Temporal Patterns of Unemployment During the Recent Recession: An Analysis of its Impact on the United States", Regional Geographic Conference UGI.Santiago, Chile, November.

2011   **Ye, X**. "Research on Regional Development in China: Patterns, Trends, and Progress", International Conference on Urbanization and Development in China. Salt Lake City, August.

2011   Carroll, M., Reid, N., & **Ye, X**. "Spatial and Temporal Patterns of the Recent Recession," European Regional Science Association. Barcelona, August.

2011   Carroll, M., Reid, N., & **Ye, X**. "Spatial Patterns of Recession in the United States", Third Global Conference on Economic Geography, COEX. Seoul, Korea, June.

2011   Reid, N., Carroll, M., & **Ye, X**. "Impact of the Recent Recession on Rural Areas in the United States", International Geographical Union (IGU) Commission on the Dynamics of Economic Spaces. Vechta Mini conference, May.

2011   **Ye, X**., & Carroll, M. "CARE: Communities at Risk under Economic Downturn", AAG. Seattle, April.

2011   Carroll, M., & **Ye, X**. "Examination of Communities at Risk Using Time Series and Panel Regression Modeling: Case Study of Ohio", Western Regional Science Association. Monterey, February.

2010   **Ye, X**., & Carroll, M. "Warn Notice Toolbox", Regional Science Association International. Denver, November.

2010   **Ye, X**. "CARE: Communities at Risk under Economic Downturn". Department of Geography and Planning. University of Toledo, November.

2010   Carroll, M., & **Ye, X**. "Unemployment Rate Clock", Regional Science Association International. Denver, November.

2010   **Ye, X**., Miller, J., & Mabrey, D. "Exploratory Space-Time Analysis of Terrorism Attacks". AAG. Washington, DC, April.

2010   **Ye, X**. "Crime Mapping", Department of Criminal Justice. University of Toledo, March.

2010   **Ye, X**. "Ohio Communities at Risk". Geography Club. Bowling Green State University, March.

2010   **Ye, X**. "An Open Source Web-based Decision Support System for Comparative Cluster-Based Economic Development Strategies". NSF Cyber-GIS Workshop, Washington DC, February.

2010   Wu, L., Wells, W., & **Ye, X**. "Patterns of Near-Repeat Gun Assaults in Houston", The Academy of Criminal Justice Sciences. San Diego, February.

2010   Carroll, M., & **Ye, X**. "Exploratory Space-Time Analysis of Communities at Risk", Western Regional Science Association. Sedona, February.

2010   **Ye, X**., & Rey, S. J. "Space-Time Empirics for Economic Growth", Western Regional Science Association, Sedona, February.

2010   **Ye, X**. "Space-Time Analysis of Regional Development in China". Department of Economics. Bowling Green State University, January.

2009   Carroll, M., & **Ye, X**. "Industry Cluster Time Path", Regional Science Association International. San Francisco, November.

2009   **Ye, X**. "Comparative Space-Time Dynamics: Open Source and Implementation". Department of Geography and Geology & Institute for Geospatial Research and Education. Eastern Michigan University, October.

2009   **Ye, X**., & Rey, S. J. "A Framework for Comparative Space Time Analysis", AAG. Las Vegas, March.

2009   Li, Y., Wei, Y. D., & **Ye, X**. "Beyond Convergence: Geographies of Regional Inequality of China", AAG. Las Vegas, March.

2008   Rey, S. J., & **Ye, X**. "Distributional Properties of LISA Time Path", Regional Science Association International. New York.

2008   Rey, S. J., & **Ye, X**. "Dynamic Pseudo Weighted Voronoi: Integrating Cartogram and Voronoi Diagrams", AAG. Boston, April.

2007   Rey, S. J., & **Ye, X**. "Comparative Spatial Dynamics of Regional Systems", Regional Science Association International. Savannah.

2007   Rey, S. J., & **Ye, X**. "Spatial Dynamics in City Size Distribution", ICA Workshop (peer-reviewed), UGA. July.

2007   Xie, Y., & **Ye, X**, "Multi-category Tempo-Spatial Pattern Analysis (McTSPA)", Geocomputation.

2007   Rey, S. J., & **Ye, X**. "Exploratory Comparative Spatial Dynamics: Integrating

Computational Geometry with ESTDA", AAG. San Francisco, April.

2007   **Ye, X**. "Spatial Analysis of Urban System", Graduate Open House, Department of Geography. University of California, Santa Barbara, March.

2006   Rey, S. J., & **Ye, X**. "Exploring Spatial Dynamics in City Size Distributions", Regional Science Association International. Toronto, November.

2006   Duque, J., & **Ye, X**. "Identifying Temporal Lag in Analytical Regionalisation Procedures", Regional Science Association International. Toronto, November.

2006   **Ye, X**. "Spatializing Zipf's Law in the Dynamic Context: US Cities 1960-2000", UCGIS. Vancouver, June.

2006   Rey, S. J., & **Ye, X**. "Comparative Space-Time Dynamics", AAG. Chicago, March.

2006   Rey, S., & **Ye, X**. "Comparative Regional Inequality between the US and China", Open House. San Diego State University, March.

2005   **Ye, X**., Xie, Y., & Batty, M. "Modeling Transition Rules in Urban Cellular Automata", Geocomputation. Ann Arbor, August.

2005   **Ye, X**. "Urban Dynamics in China", AAG. Denver, March.

2004   Xie, Y., & **Ye, X**. "Comparative Analysis of Spatial Pattern Changes: CASP", GIScience. Maryland, October.

2004   **Ye, X**., & Xie, Y. "Simulating Residential Land Use and Housing Market Change in a GIS based CA-MAS environment", AAG. Philadelphia, March.

2003   Xie, Y., Batty, M., & **Ye, X**. "Examining Policy Impacts on Urban Growth from GIS-based Cellular Automata Models", International Seminar on Geo-Cellular Automata and Its Applications. Beijing, December.

2003   Xie, Y., & **Ye, X**. "Regional Patterns of Urban System Evolution in China." CPGIS Global Day Workshop, Ann Arbor, October.

2003   **Ye, X**. "Understanding Urban Sprawl in A GIS Based CA Environment", Joint Meeting of the East Lakes and West Lakes Divisions of AAG. Kalamazoo, October.

2003   Nystuen, J., Batty, M., Xie, Y., **Ye, X**., & Wagner, T. "The Dynamics of Zipf", University of Michigan, May.

2003   **Ye, X**., & Xie, Y. "Modeling Suburbanization in Metropolitan Detroit", AAG. New Orleans, March.

2002   **Ye, X**., & Wei, Y. D. "Intra-provincial Inequality in China", AAG. Los Angeles, March.

COURSES TAUGHT

Texas A&M University

URPN 460/500/510 Sustainable Communities (Undergraduate/Graduate, Fall 2024)

URSC 689 Programming for Urban and Regional Analytics (Graduate, Spring 2022/2023)

URSC 689 Network Science of Cities (Graduate, Fall 2021/2022)

CARC 601 Research Foundations (Graduate, Fall 2022/2023/2024)

PLAN 693 Professional Study (Graduate, any semester)

URSC 691 Research/Independent Study (Graduate, any semester)

New Jersey Institute of Technology

IS 465 Advanced Information Systems (Undergraduate, Spring 2020)

IS 665 Data Analytics for Info System (Graduate, Fall 2019)

IS 601 Web Systems Development (Graduate, Fall 2018, Spring 2019)

IS 488 Independent Study in Info Systems (Spring 2019; Spring 2020)

Kent State University

Internship Advisor for Science Experience (Fall 2015/Spring 2016/Summer 2016/Fall 2016)

GEOG 4/5/79195 Spatial Social Network Analysis (Undergraduate/Graduate, Spring 2016)

GEOG 49195/69083 Geodatabase (Undergraduate/Graduate, Fall 2015, 2016)

DSCI 40910 Capstone in Digital Sciences (Undergraduate, Fall 2015/Spring 2016/Fall 2017)

GEOG 49195/59195/79195 Spatiotemporal Analytics (Undergraduate/Graduate, Spring 2015)

GEOG 49195/59195/79195 GIS Principles (Undergraduate/Graduate, Fall 2017)

GEOG 49076/59076/79076 Spatial Programming (Undergraduate/Graduate, Fall 2013, 2014, 2016, Spring 2018)

GEOG 69082 CyberGIS (Spring 2018)

Bowling Green State University

GEOG 4000/ GEOL 6810 Advanced GIS (Undergraduate/Graduate, Spring 2013)

GEOG 4250/5250 Applied GIS (Undergraduate/Graduate, Fall 2012)

GEOG 4240/5240 Geographic Information Systems (Undergraduate/Graduate, Spring 2012)

GEOG 2250 Global Economic Geography (Undergraduate, Fall 2010, 2011)

GEOG 4020/5020 Regional Economic Geography (Undergraduate/Graduate, Spring 2011)

GEOG 4900 Geovisualization (Undergraduate, Spring 2013)

GEOG 4900 Economic Geography of the Music Industry (Undergraduate, Spring 2013)

GEOL 6990 Thesis Research (Graduate, Spring 2012)

GEOG 4900 Urban Modeling (Undergraduate, Spring 2012)

GEOG 4900 Economic Globalization (Undergraduate, Spring 2012)

SEES 6800 Seminar in Space Time Analysis (Graduate, Spring 2011)

SEES 6840 Directed Readings in Geology (Graduate, Spring 2011)

GEOG 4900 Tracking Terrorism (Undergraduate, Spring 2011)

SEES 6800 Seminar in Spatial Disease Mapping (Graduate, Fall 2010)

GEOG 4900 Public Health Data Analysis (Undergraduate, Fall 2010)

UCSB-SDSU

GEOG 385 Spatial Data Analysis (Undergraduate, Spring 2008, Fall 2008)

STUDENTS ADVISING

Advisee Award:

2026   AAG 2026 Student Travel Grant (Yuchen Wang, Co-Advisor: **Xinyue Ye**)

2025   Jeanne X. Kasperson Student Paper Competition Award, AAG Hazards Risk Disaster Specialty Group (Wenyu Zhang, Advisor: **Xinyue Ye**)

2025   Barclay Gibbs Jones Award for the Best Dissertation in Planning, ACSP
        (Chunwu Zhu, Advisor: **Xinyue Ye**)

2025   The Land 2024 Young Investigator Award (Wanxu Chen, Advisor: **Xinyue Ye**)

2025   TAMIDS Data Science Ambassador Scholarship (Weishan Bai, Advisor: **Xinyue Ye**)

2025   TAMIDS Data Science Ambassador Scholarship (Wenjing Gong, Advisor: **Xinyue Ye**)

2025   AI and Cities: An International Forum for Innovation and Collaboration (Weishan Bai [Excellent Presentation/Research Award], Tianchen Huang [Outstanding Presentation/Research Award], Shoujia Li [Honorable Mention], Xinyu Li [Excellent Presentation/Research Award], Advisor: **Xinyue Ye**)

2025   NVIDIA Support for Short-Term Compute Needs on "mapping mental states in urban spaces—integrating EEG data, deep learning, and digital twin technology" (Weishan Bai, Advisor: **Xinyue Ye**)

2025   NVIDIA Support for Short-Term Compute Needs on "developing an AI-based environmental auditing framework using street view and aerial images" (Chunwu Zhu, Advisor: **Xinyue Ye**)

2025   NVIDIA Support for Short-Term Compute Needs on "building a knowledge network and RAG-based chatbot for the campus digital twin" (Suphanut Jamonnak/Wenyu Zhang, Advisor: **Xinyue Ye**)

2025   NVIDIA Support for Short-Term Compute Needs on "creating fine-scale urban weather datasets at the neighborhood level" (Cuiling Liu/Austin Wei, Advisor: **Xinyue Ye**)

2025   NVIDIA Support for Short-Term Compute Needs on "using digital twins and transformer networks to model & mitigate human heat stress" (Wenjing Gong, Advisor: **Xinyue Ye**)

2025   Ashok K. Dutt Award for Best Graduate Student Paper, AAG Regional Development and Planning Specialty Group (Wenjing Gong, Advisor: **Xinyue Ye**)

2025   Texas A&M Telehealth Institute Student Fellow (Wenjing Gong, Advisor: **Xinyue Ye**)

2025   Research Fellowship, Texas A&M Center of Digital Humanities Research for "Mapping Cool Corridors Thermal Exposure and Shade Dynamics for a Walkable TAMU" (Cuiling Liu, Advisor: **Xinyue Ye**)

2024   TAMIDS Data Science Senior Ambassador Scholarship (Chunwu Zhu, Advisor: **Xinyue Ye**)

2024   NSF CyberTraining Project Partnership Award (Chunwu Zhu, Advisor: **Xinyue Ye**)

2024   AAG Robert Raskin Student Paper Award (3rd place) for "Neuro-Cognitive Enhancement of Remote Sensing Image Classification" (Weishan Bai, Advisor: **Xinyue Ye**)

2024   AAG Robert Raskin Student Paper Award (Finalist) for "Enhancing 3D Disaster Area Modeling through Integrating Remote Sensing and Natural Language Processing" (Shoujia Li, Advisor: **Xinyue Ye**)

2023   Top-10 score in the HuMob Challenge 2023 at ACM Sigspatial (Jiaxin Du, Advisor: **Xinyue Ye**)

2023   TAMU International Student & Scholar Services Scholarship for Academic Achievement (Jiaxin Du, Advisor: **Xinyue Ye**)

2023   TAMIDS Senior Data Science Ambassador Scholarship (Jiaxin Du, Advisor: **Xinyue Ye**)

2023   TAMIDS Data Science Ambassador Scholarship (Chunwu Zhu, Advisor: **Xinyue Ye**)

2023   Outstanding Doctoral Program Student Award, Texas A&M Transportation Institute (Chunwu Zhu, Advisor: **Xinyue Ye**)

2023   The Second Place and Best Data Award, the Texas A&M Student Data Science Competition (Jiaxin Du, Chunwu Zhu, Weishan Bai, Shoujia Li, Tianchen Huang, Advisor: **Xinyue Ye**)

2023   Howard Balanoff Scholarship, Department of Landscape Architecture and Urban Planning, Texas A&M University (Jiaxin Du, Advisor: **Xinyue Ye**)

2022   Taylor & Francis acknowledges the contribution of knowledge graph paper (Jiaxin Du: first author, Xinyue Ye: corresponding author) on international GIS day on Nov 16 2022 (the international celebration of GIS technology): Du, J., Wang, S., Ye, X*., Sinton, D. S., & Kemp, K. (2022). GIS-KG: building a large-scale hierarchical knowledge graph for geographic information science. International Journal of Geographical Information Science, 36(5), 873-897. https://twitter.com/tandfenviro/status/1592963486136647680

2022   Graduate Student Research Competition of Texas GIS Day (Jiaxin Du [#2], Advisor: **Xinyue Ye**)

2022   Graduate Student Research Competition of Texas GIS Day (Tianchen Huang [#3], Advisor: **Xinyue Ye**)

2022   CPGIS Student GIS Paper International Competition Runner Up Award (Chunwu Zhu, Advisor: **Xinyue Ye**)

2022   Energy Institute Fellowship Award (2022-2023) (Chunwu Zhu, Advisor: **Xinyue Ye**)

2022   TAMIDS Data Science Ambassador Scholarship (Jiaxin Du, Advisor: **Xinyue Ye**)

2022   3rd Place, TAMIDS Student Data Science Competition (Jiaxin Du, Advisor: **Xinyue Ye**)

2022   Melbern G. Glasscock Humanities Special Award (the only Graduate Oral Winner) at Texas A&M University Student Research Week for "GIS-KG: Building a Large-Scale Hierarchical Knowledge Graph for Geographic Information Science" and "Understanding the Business-Customer Network Using Online and Offline Data: A Heterogeneous Graph Transformer Approach" (Jiaxin Du, Advisor: **Xinyue Ye**)

2022   "Inequality among community resilience when facing disasters: a perspective from human mobility" received Student Lightning Talk Award at annual meeting of University Consortium for Geographic Information Science, Syracuse University (Chunwu Zhu, Advisor: **Xinyue Ye**)

2022   Award of Excellence (highest award) for the Research Category from the Texas Chapter of the American Society of Landscape Architects for "Evaluation of Galveston Dike Performance in Multiple Storm Scenarios" (Zhenhang Cai, Co-advisors: Galen Newman, **Xinyue Ye,** David Retchless)

2020   AAG Robert Raskin Student Paper Award (3rd place) for "Interactive Visual Analytics for Sparse Trajectory Data" (Jiaxin Du, Advisor: **Xinyue Ye**)

2020   NJIT Love in the time of COVID-19 competition (Honorable Mention) for "Intelligent COVID-19 Research Paper Analysis System" (Jiaxin Du, Advisor: **Xinyue Ye**)

Current Doctoral Students (* chair)

18. Shashank Karki (Geospatial and Environmental Analysis, Virginia Tech) TBD

17. Wenyu Zhang * (Urban and Regional Science, TAMU) TBD

16. Wenjing Gong * (Urban and Regional Science, TAMU) TBD

15. Yetunde Fawehinmi (Higher Education Administration, TAMU) TBD

14. Zhenhang Cai (Urban and Regional Science, TAMU) A Framework of Increasing Flood Resilience in Galveston, Texas: Integrating Digital Twinning, Vacant Lot Buyouts, and Green Infrastructure

13. Shoujia Li* (Urban and Regional Science, TAMU) Co-Designing Urban Heat Resilience with Digital Twins in Low-Income Communities

12. Tianchen Huang* (Urban and Regional Science, TAMU) AI-Driven Design Workflow for Heat Mitigation in Urban Open Spaces: A Framework Integrating Optimization, Microclimate Modeling, and Generative Visualization

11. Weishan Bai* (Urban and Regional Science, TAMU) Exploring Human Emotional and Cognitive Responses to Urban Environments Using EEG Technology: A Multi-Stage Research Approach

10. Jaeyoon Kim (Construction Science, TAMU) Participatory Sensing and Digital Twin City for Risk-Informed Decision-Making

9. Quan Sun (Urban and Regional Science, TAMU) TBD

8. Dan Zhou (Business Data Science, NJIT) Multi-dimensional business data fusion, completion, and prediction with deep neural networks

7. Schuyler Carter (Urban and Regional Science, TAMU) Exploring the Special Needs Experience of Museums through Grassroots Archival Repositories (Gar) Through Multi-Sensory Exhibit Curation

6. Yuning Ye * (Urban and Regional Science, TAMU) TBD

5. Zhiheng Hu * (Urban and Regional Science, TAMU) TBD

4. Luming Xiao (Architecture, TAMU) AI-Driven Daylighting Support System: A Comprehensive 3D Grid-Based Multi-Directional Metamodel for Daylighting Design

3. Sixu Li (Multidisciplinary Engineering, TAMU) TBD

2. Jose Congo-Pilartes (Geospatial Computer Science, Texas A&M University-Corpus Christi) Leveraging Reality Capture and 3D Imaging Remote Sensing Technologies for Modeling Built and Natural Environments

1. Vivek Gupta (Civil and Environmental Engineering, TAMU), TBD

Former Doctoral Students (* chair)

32. Xiaochuan Gou (Computer Science, King Abdullah University of Science and Technology) Explainability and Efficiency in Spatio-Temporal Models: Applications to Traffic Forecasting

31. Chunwu Zhu * (Urban and Regional Science, TAMU) Urban AI for Safe and Equitable Streets: Evaluating Roadway Safety and Equity Through Artificial Intelligence Approach

30. Chia Wei Hsu (Civil and Environmental Engineering, TAMU) Understanding Urban Resilience through Post-Disaster Human Mobility Patterns and Recovery Dynamic

29. Wenbo Wang (Informatics, NJIT) Automated Fact Checking by Incorporating Multi-Faceted Reference Search and Contextual Knowledge

28. Mashari Alatawi (Computer Science and Engineering, TAMU) On the Security of End-to-End Encrypted Messaging and Calling Applications

27. Jiaxin Du * (Urban and Regional Science, TAMU) Customer Visitation Pattern: A Robust Heterogenous Network Model of Human Mobility

26. Huiyu Lin (Geography, KSU) Unraveling Crime Dynamics: A Spatiotemporal Analysis of Crime Hotspots

25. Jiahe Bian (Urban and Regional Science, TAMU) Riding Transit in New Technological Environment: Smartphone Transit Apps and Transit Trip Making

24. Jingqiu Ren (Sociology, TAMU) Where Have All the Healthcare Workers Gone? Examining Healthcare Worker Internal Migration and Its Impact on Community Health in the U.S.

23. Bahareh Alizadeh (Construction Science, TAMU) User-Centered Artificial Intelligence for High Spatial Urban Flood Mapping

22. Pooja Honnutagi (Telecommunication Engineering, Visvesvaraya Technological University, India) Fusion based Strategy to Enhance Underwater Videos and Images

21. Ismael Ahrazem (Applied Statistics, Polytechnic University of Madrid) Application of Machine Learning to Variable Importance Analysis

20. Weichuan Dong* (Geography, KSU) Geospatial approaches to exploring social determinants of cancer outcomes

19. Phung Lai (Informatics, NJIT) Ontology-based Interpretable Machine Learning for Textual Data

18. Han Hu (Informatics, NJIT) A Large-Scale Deep Learning-based Drug Abuse Detection and Analysis on Online Social Media

17. Ruiqi Shen (Informatics, NJIT) Learner Autonomy for Computer Science Learners.

16. Zi Chen (Civil and Environmental Engineering, University of New South Wales) A Unified Framework for Filtering and Analysis of Social Media Data to Improve Situational Awareness in Typhoon Impact

15. Qingsong Liu* (Geography, KSU) The Role of Mobility in the Socio-Spatial Segregation Assessment with Social Media Data.

14. Yu Xu (Informatics, NJIT) Supporting User Interaction and Socialization in a Collaborative Online Shopping Context

13. Chao Ma (Computer Science, KSU) Visual Analytic Technique and System of Spatiotemporal-semantic Events

12. Haitao Yuan (Electrical and Computer Engineering, NJIT) Energy and Performance-optimized Scheduling of Tasks in Distributed Cloud and Edge Computing Systems.

11. Adiyana Sharag-Eldin* (Geography, KSU) The Role of Geography in Social Media Communication.

10. Yan Chen (Urban Planning, University of North Carolina-Chapel Hill). Analyzing Determinants and Outcome of Urban Vibrancy: Big Data Approach on Connecting Built Environment, Activity, Image, and Retail Performance of Places.

9. Farah Kamw (Computer Science, KSU) Utilizing Big Trajectory Data for Urban Visual Analytics and Accessibility Studies.

8. Shamal Dohuki (Computer Science, KSU) Interactive Visual Querying and Analysis for Urban Trajectory Data.

7. Zheye Wang * (Geography, KSU) Analyzing social media data to enrich human-centric information for natural disaster management. KSU.

6. Wei Kang (Geography, Arizona State University) Spatially Explicit Exploratory and Confirmatory Approaches to the Analysis of Regional Economic Growth and Convergence.

5. Salem Othman (Computer Science, KSU) Autonomous Priority Based Routing for Online Social Networks.

4. Brian Bartman (Computer Science, KSU) Supporting Software Exploration with a Syntactic Aware Source Code Query Language.

3. Mohammad Alnasrallah (Geography, KSU) Geographic Disparities of Obesity Prevalence as a Public Health Issue in Summit County, Ohio.

2. Xiaoke Huang (Computer Science, KSU) Using Graph Modeling in Several Visual Analytics Tasks.

1. Yelong Shen (Computer Science, KSU) Social Network Mining for Recommendation System.

Current Master Students (* chair)

1. Anant Mehta (Computer Science and Engineering, TAMU) TBD

2. Agastya Todi (Computer Science and Engineering, TAMU) TBD

3. Jessebel Vistro* (Urban Planning, TAMU) TBD

Former Master Students (* chair)

19. Yaohao Chen * (Urban Planning, TAMU) Campus Digital Twin Application: Combining Space-Time-Path and Visual Analytic Approach for Mobility Data

18. Noah M. Garcia * (Urban Planning, TAMU) Digital Twins and Their Uses in Texas A&M's Aggie Spirit Bus Routes

17. Katelyn Finn (Architecture, TAMU) A Healthy House: A Multi-scalar Approach to Healthy Living

16. Xinke Huang * (Urban Planning, TAMU) XGBoost Model for Park Visitation Prediction

15. Adolfo Gonzalez * (Urban Planning, TAMU) Urban Heat Island and Mitigation Measures: A Literature Review

14. Zhiheng Hu * (Urban Planning, TAMU) Synthesizing Population for Medical Travel Demand in Rural Areas

13. Gregory Fruits (Geography, KSU) Crime and Obesity: A Case Study Using Akron, Summit County, Ohio.

12. Kok Chhay Ly * (Geography, KSU) A Network Analysis of Confessions and Arrests under Khmer Rouge.

11. Rob Squires (Geography, KSU) A Longitudinal Comparison of Fine Scale Environmental Risk Factors and Waterborne Bacterial Presence in Haiti.

10. John Woodard (Digital Sciences, KSU) Building an Enterprise GIS from an Enterprise Architecture Foundation.

9. Hui Tang (Digital Sciences, KSU) Urban Transportation Analysis Using Taxi Trajectory and Weather Data.

8. Nikolai Kolba (GIS, East Stroudsburg University of Pennsylvania) Application of Geographic Information Science in Long-Term Population Monitoring of the Timber Rattlesnake (Crotalus Horridus) in Pennsylvania.

7. Zhuo Chen (Geography, KSU) Efficient Information Diffusion on Online Social Networks: An Experiment of Agent-Based Modeling.

6. Megan Hornyak (Geography, KSU) Education Quality and Community Development.

5. Huanyang Zhao (Geography, KSU) Spatiotemporal Analyses of Religious Establishments in China: A Case Study of Zhejiang Province.

4. Rebecca Alcorn (Geology, BGSU) Volcanic Risk Assessment with the Use of a GIS-Based Model: Case Studies in Central Oregon and North-Central New Mexico.

3. Kenny Brown (Geology, BGSU) Landslide Detection within Glacially Dominated Cuyahoga River Valley Using LIDAR, Classification tree analysis, Artificial Neural Network Analysis Modeling.

2. Steven C. Cathcart (Geology, BGSU) Collaborative Spatial Decision Making for Wind Energy Development in Northwest Ohio.

1. Jiefan Yu * (Geology, BGSU) Space-Time Analysis of Earthquake: The Case of Yellowstone National Park.

Current Postdoctoral Scholars

Dan Zou (PhD, Sun Yat-sen University), 2025-

Xiaoming Guo (The University of Alabama), 2025-

Sulong Zhou (PhD, University of Wisconsin-Madison), 2024-

Suphanut Jamonnak (PhD, Kent State University), 2023-

Former Postdoctoral Scholars

Cuiling Liu (PhD, Louisiana State University), 2023-25.

Keshu Wu (PhD, University of Wisconsin-Madison), 2024-25.

Joey Lee (PhD, The Hong Kong Polytechnic University), 2024-25. Currently Lecturer, Department of Geography, Planning, and Sustainability, University at Albany.

Yu Han (PhD, University of Florida), 2021-22. Currently Assistant Professor, Faculty of Geo-Information Science and Earth Observation, University of Twente.

Tao Hu (PhD, Wuhan University), 2016-18. Currently Assistant Professor, Department of Geography, Oklahoma State University.

Lanxue Dang (PhD, Henan University), 2016-17. Currently Associate Professor, Department of Computer Science, Henan University

Serhiy Polyakov (PhD, University of North Texas), 2015-16. Currently Data Management Librarian, Weill Cornell Medicine – Qatar.

Visiting Scholars funded by the Southeastern Conference Faculty Travel Program

Sicheng Wang (Assistant Professor, University of South Carolina), 2014-15

Wanyun "Abby" Shao (Associate Professor, The University of Alabama), 2013-14

SERVICE TO THE PROFESSION

2025-26   Member, Program Committee, GeoAI 2026

2024   Member, Steering Committee, International Symposium of Spatiotemporal Data Science

2024   Moderator, Digital Twins for Social and Behavioral Systems, National Academies

2024   Moderator, Ethical Needs and Questions for Digital Twins, National Academies

2023-24   Member, Steering Committee, Joint Conference of ISEH ICEPH & ISEG on Environment and Health, Ireland (ISEH: International Symposium on Environment and Health; ICEPH: International Conference on Environmental Pollution and Health; ISEG: International Symposium on Environmental Geochemistry)

2023-24   Planning Team Member, Texas Coastal Adaptation and Resilience Conference

2023-24   Organizing Committee Member, AI in Agriculture Conference, Texas

2023   Moderator, Digital Twins for the Electricity System, National Academies

2023   Poster/Demo Co-Chair of the 2023 ACM SIGSPATIAL Conference, Germany

2023-25   President, Spatial Decision Support Consortium

2023-24   Chair, Barclay Gibbs Jones Award Selection Committee for the Best Dissertation in Planning, ACSP

2023-   Advisor, California Digital Equity Operationalization

2022-   Founder and Lead, Urban Data Science Working Group, ACSP

2022-23   Program Co-Chair, The 18th International Conference on Computational Urban Planning and Urban Management (CUPUM) in Montreal, Canada 2023

2022-23   Member, Barclay Gibbs Jones Award Selection Committee for the Best Dissertation in Planning, ACSP

2023   Program Committee Member, AAG Symposium on Harnessing the Geospatial Data Revolution for Sustainability Solutions

2023   Program Committee Member, AAG GeoAI Symposium

2023   Judge, Smart Cities Innovation Competition by International Society for Urban Informatics

2022   Rising Star Award Selection Committee Member, ACM SIGSPATIAL

2022   Invited Faculty Contributor, US-Japan Workshop on Needs, Priorities and Partnerships to Advance Human-Centered Data for Resilience (NSF Funded)

2022   Program Committee Member, 1st ACM SIGSPATIAL International Workshop on Geospatial Knowledge Graphs

2021-   Leader, Initiative on Convergence Research of GIScience, Humanities, and Social Sciences, UCGIS

2021-23   Vice President, Spatial Decision Support Consortium

2021-23   Standing Review Board Member, Humanities and Social Sciences Panel of the Research Grants Council (RGC) under the University Grants Committee, Hong Kong (UGC)

2021   Program Committee Member, The 1st International Workshop on Methods, Models, and Resources for Geospatial Knowledge Graphs and GeoAI

2021   Program Committee Member, GeoComputation 2021

2021   Program Committee Member, GIScience 2021

2021   Technical Co-Chair and Program Committee Member, The first IEEE International Conference on Intelligent Reality

2020-   Research Committee Member, North American Alliance of Hazards and Disasters Research Institutes (NAAHDRI)

2020   Mt. Olive High School (virtual) Hackathon Computer Science Faculty Tutor

2020   Program Committee member, the 11th International Conference on Geographic Information Science (GIScience 2020), Poznań, Poland, September.

2020	Program Committee member, Symposium on Frontiers in CyberGIS and Geospatial Data Science, AAG, Denver, Colorado, April.
2018-2022	Secretary/Treasurer/Vice Chair/Chair, Cartography Specialty Group, AAG
2017-	Board of Directors, Spatial Decision Support Consortium
2017-2019	Vice Chair, Research Committee, UCGIS
2017-	Committee Member, Geospatial Analysis and Modeling (GAM) Research Agenda Committee, International Cartographic Association
2010-2019	Webmaster/Secretary/Vice Chair/Chair, China Specialty Group, AAG
2016-	International Association for China Planning Technical Review Committee Member
2015-2018	Board of Directors, Applied Geography Conference
2010-2018	Deputy General Secretary/Board of Directors/Elected President/President/BOD Chair, The International Association of Chinese Professionals in Geographic Information Science (CPGIS)
2015-2017	International Research and Scholarly Exchange Committee, AAG
2015-2017	Co-Chair, Asian Geography Specialty Group, AAG
2014-	Student Paper Competition Committee Member, Annual CPGIS Student Paper Competition
2014-2016	Secretary, Geographic Information Science and Systems Specialty Group, AAG
2014	Member, Committee for ICA-OSGeo-ISPRS Award for Open Geospatial Science
2013	Invited to the University Consortium for Geographic Information Science's Geographic Information Science & Technology Body of Knowledge Task Force Steering Committee, along with other 24 members across the nation
2012-2015	Member at Large/Vice Chair/Chair, Regional Development and Planning Specialty Group, AAG
2012	One of the two US representatives to the Youth commission, International Society for Digital Earth

CONFERENCE/WORKSHOP/PANEL/ROUNDTABLE/SESSION ORGANIZATION

2025   Tao, J., **Ye, X.**, Rojas-Muñoz, E., Lee, J., Rhim, J., & Zheng, M. The Workshop of Virtual Environment-Based Synthetic Data Generation for Robotic Training, The 22nd International Conference on Ubiquitous Robots (UR 2025), College Station, June/July.

2025   Wang, P., Quan, J., **Ye, X.**, & Xiong, H. The 1st Workshop on AI for Urban Planning, The 39th Annual AAAI Conference on Artificial Intelligence, Philadelphia, March.

2024   **Ye, X.,** Sanchez, T., & Li, W. "Urban AI in Planning" Roundtable, ACSP, Seattle, November.

2023   **Ye, X.** (coordinator), Panel on Human Dynamics Research: Status and Prospects, AAG, Denver, March.

2023   **Ye, X.** (coordinator), ISDE International Lecture, online, March.

2023   **Ye, X.,** Sanchez, T., & Li, W. "Urban Data Science in Planning" Roundtable, ACSP, Chicago, October.

2022   **Ye, X.** (co-organizer), Panel on Assessing Sentiment in Sexual Assault Reports Using Natural Language Processing, ASC (The American Society of Criminology) Annual Meeting, Atlanta, November.

2022   **Ye, X.,** Sanchez, T., & Li, W. "Urban Data Science in Planning" Roundtable, ACSP, Toronto, November.

2022   **Ye, X.,** Shi, L., & Hsu, D. "Data Science and the Climate Transformation" Roundtable, ACSP, Toronto, November.

2022   **Ye, X.** & Peng, Z., Panel on AI-Enabled Urban and Regional Planning, IACP (International Association for China Planning) Annual Conference, Virtual, June.

2021   **Ye, X.** & Sanchez, T. "AI in Planning" Roundtable, ACSP, Virtual, October.

2020   **Ye, X**. (co-organizer), The 2nd "AI with GIS for Social Good" Session, The 19th IEEE International Conference on Machine Learning and Applications (IEEE ICMLA'20), Miami, December.

2014-   **Ye, X**. (co-organizer), Symposium on Human Dynamics Research, AAG.

2019   **Ye, X**. (co-organizer), Annual International Conference on Geospatial Artificial Intelligence for Urban Computing, Guangzhou, November.

2019   **Ye, X**. (co-organizer), The 1st "AI with GIS for Social Good" Session, The 8th International Conference on Computational Data and Social Networks (CSoNet 2019). Ho Chi Minh City, Vietnam, November.

2019   **Ye, X**. (co-organizer), International Conference on Urban Computing and Smart Planning, Nanjing, September.

2019   **Ye, X**., Bandana, K., Wang, S., & Li, Z. Session on Smart Cities and Urban Computing, AAG, Washington DC, April.

2019   **Ye, X**., Andris, C., & Xu, Y. Session on Spatial-Social Networks in GIS, AAG, Washington DC, April.

2019   **Ye, X**. (Program Committee member), Symposium on Location-Based Big Data, immediately prior to the International Cartographic Conference 2019 in Tokyo, Japan

2018-   **Ye, X**. (Program Co-Chair), ACM SIGSPATIAL Annual International Workshop on Advances in Resilience and Intelligent Cities, November.

2018   **Ye, X**. (Program Committee Member), International Workshop on GVIZ2018 (New Directions in Geovisual Analytics: Visualization, Computation, and Evaluation), GIScience 2018, Melbourne, Australia

2018   **Ye, X**. (Program Committee Member), International Workshop on Rethinking the ABCs: Agent-Based Models and Complexity Science in the age of Big Data, GIScience 2018, Melbourne, Australia

2018   **Ye, X**., Wang, S., Mesev, V., & Li, Z. Session on Smart Cities and Urban Computing, AAG, New Orleans, April.

2018   **Ye, X**. Liu, X., Andris, C., & Xu, Y. Session on Spatial-Social Networks in GIS, AAG, New Orleans, April.

2018   **Ye, X**., & Woodworth, M., Sessions on Urban and Regional Development in China, AAG, New Orleans, April.

2018   **Ye, X**. (co-organizer), Plenary Session on Area Development and Policy, AAG, New Orleans, April.

2018   **Ye, X**. (co-organizer), Artificial Intelligence and Deep Learning Symposium: Big Data and Mining for Natural Hazards, AAG, New Orleans, April.

2018   **Ye, X**. (co-organizer), Spatiotemporal Symposium: Big Data Computing for Geospatial Applications, AAG, New Orleans, April.

2017   **Ye, X**. (co-organizer), Spatiotemporal Symposium, AAG, Boston, April.

2017   **Ye, X**., & Wang, S. Session on Smart Cities and Urban Computing, AAG, Boston, April.

2017   Liu, W., **Ye, X**., Dunford, M., Hardy, S., & Aoyama, Y. Plenary Session on Area

Development and Policy, AAG, Boston, April.

2017   **Ye, X**., Liu, X., & Andris, C. Session on Spatial-Social Networks in GIS, AAG, Boston, April.

2017   **Ye, X**. (International Scientific Committee Member), International Workshop on Open Geographic Modeling and Simulation, Nanjing, August.

2017   **Ye, X**. (Organizing Committee Member), The 2nd International Symposium on Spatiotemporal Computing. Harvard University, August 7-9.

2017   **Ye, X**. (Program Committee Member), ICC2017 Pre-Conference Symposium on Location-Based Social Media and Tracking Data.

2017   **Ye, X**. (Program Committee Member), ICSDM2017 (Third ISPRS & IEEE International Conference on Spatial Data Mining and Geographical Knowledge Services).

2017   **Ye, X**. (Program Committee Co-Chair), 25rd International Conference on Geoinformatics.

2016   **Ye, X**. (Program Committee Member), the Third International Conference on CyberGIS and Geospatial Data Science.

2016   **Ye, X**. (International Steering Committee Member), International Conference on Cartographic Visualization of Big Data for Early Warning and Disaster/Crisis Management (EW&CM): Methodology, Techniques and Applications.

2016   **Ye, X**., & Liu, L. Spatially Integrated Humanities and Social Sciences, International Geographical Congress, Beijing, August.

2016   Mitra, C., & **Ye, X**. Asia Symposium, AAG, San Francisco, April.

2015-   **Ye, X**. (co-chair), Annual International Conference on Geoinformatics in Sustainable Ecosystem and Society.

2015   **Ye, X**. Three-day Workshop on Advanced Spatial Econometrics, Guangzhou, June.

2015   **Ye, X**., Tsou, M., Shaw, S., and Chow, E. Human Dynamics in the Mobile Age. I, II, III, AAG, Chicago, April.

2015   **Ye, X**. Space-Time Dynamics of Transitional China, AAG, Chicago, April.

2015   Tsou, M., & **Ye, X.** Social media Pre-conference Workshop at International Conference on Location-based Social Media Data, Athens, March.

2015   **Ye, X**. (Program Committee Member), The First international workshop on

spatiotemporal computing.

2015   **Ye, X**. (Program Committee Member), The Fourth International Workshop on Regional, Urban, and Spatial Economics, Beijing, June.

2014-   **Ye, X**. (Program Committee Member), SciPy International Conference.

2014   **Ye, X**. (Organizing Committee Member), International Geospatial Health Research Symposium

2014   **Ye, X**. (Program Committee Member), OGC Academic Summit.

2014   **Ye, X**. Three-day Workshop on Intermediate Spatial Econometrics, Guangzhou, December.

2014   **Ye, X**. Social Media Mapping and Analysis, GIS Day demo, Kent, November.

2014   **Ye, X**. Applications of New Sources of (Big) Data in Regional Science III, Regional Science Association International, Washington DC, November.

2014   **Ye, X**. Geospatial Analysis II, Applied Geography Conference, Atlanta, October.

2014   Bao, S., **Ye, X**., Zhao, E., & Wu, Y. Three-day Workshop on spatial economic analysis, Shanghai, July.

2014   Bao, S., & **Ye, X**. One-day Workshop on Spatial Social Science, Shanghai, July.

2014   **Ye, X**. Three-day Workshop on Introduction to Spatial Econometrics, Guangzhou, June.

2014   **Ye, X**., Tsou, M., & Shaw, S. Human Dynamics in the Mobile Age. I, II, III, AAG, Tampa, April.

2013-   **Ye, X**. (Program Committee Co-Chair), Annual International Symposium of Spatially Integrated Social Science and Humanities.

2013   Bao, S., **Ye, X**., Zhao, E., & Wu, Y. Three-day Workshop on Space-time Analysis, Beijing, June.

2013   **Ye. X**., & Ye, T. Comparing China and the U.S.: Geographic Perspectives in an Era of Globalization and Emerging Asia. I, II, III, AAG, Los Angeles, April.

2013   **Ye, X**., & Shi, P. Integrated Natural Disaster Reduction and Sustainable Development in China. I, II, III, AAG, Los Angeles, April.

2012   Bao, S., **Ye, X**., Zhao, E., & Wu, Y. Three-day Workshop on Internet-based Space-Time Analysis, Shanghai, June.

2012   **Ye, X**., & Liu, L. Spatial Crime Analysis and Modeling, GeoInformatics, Hong Kong, June.

2012   **Ye, X**., & Shi, P. Integrated Natural Disaster Reduction and Sustainable Development in China. I, II, III, AAG, New York, February.

2012   Wei, Y., & **Ye, X**. Urbanization, Land Use, and Regional Development in China. I, II, III, AAG, New York, February.

2011-   **Ye, X**. (Program Committee Member), Annual International Conference on Geoinformatics

2011   **Ye, X**., Hwang, M., and Bao, S. Workshop on Spatial Data Analysis in Cyberspace: Data, Methodology and Tools (co-sponsored by GeoDa Center for Geospatial Analysis and Computation, Arizona State University, and China Data Center, University of Michigan), Miami, November.

PEER REVIEWER: GRANTS, JOURNALS, AND BOOKS

Grants: Agriculture and Agrifood Canada, US National Science Foundation, US National Geographic Society/American Institute of Biological Sciences, US NOAA, UK Royal Society, Marsden Fund (Royal Society of New Zealand), Dutch Research Council, Swiss National Science Foundation, Research Grants Council of Hong Kong, Canada Research Chairs Program, European Science Foundation, Mitacs (Canada), Austrian Science Fund, the Agency for Science, Technology and Research (Singapore), Woods Hole Oceanographic Institution, The United Arab Emirates University

Journals: Annals of the American Association of Geographers; Applied Economics; Applied Geography; Area Development and Policy; Asian Geographer; Australian Journal of Agricultural and Resource Economics; Australian Planner; Biosystems Engineering; Bulletin of Atmospheric Science and Technology; Cartography and Geographic Information Science; Cities; Data-Centric Engineering; Demographic Research; Discrete Dynamics in Nature and Society; Ecological Indicators; Ecological Informatics; Ecological Modeling; Economic Development Quarterly; Energy Strategy Reviews; Environmental Management; Environmental Pollution; Environmental Science & Technology; Energy Strategy Reviews; Environmental Science and Policy; Finance Research Letters; Future Internet; Future Generation Computer Systems; Geocarto International; Geographical Analysis; Geojournal; Habitat International; Heliyon; Human Ecology Review; IEEE Access; IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing; IEEE Transactions on Intelligent Transportation Systems; IEEE Transactions on Visualization and Computer Graphics; IEEE VR 2022; Information & Management; Information Systems Frontiers; International Development Planning Review; International Journal of Applied Earth Observations and Geoinformation; International Journal of Digital Earth; International Journal of Disaster Risk Science; International Journal of Geographical Information Science; International Regional Science Review; ISPRS International Journal of Geo-Information; Journal of Asian Architecture and Building Engineering; Journal of Big Data; Journal of Cleaner

Production; Journal of Economic Geography; Journal of Geographical Systems; Journal of Hazardous Materials; Journal of Information Science; Journal of Parallel and Distributed Computing; Journal of Planning Education and Research; Journal of the American Planning Association; Journal of Traffic and Transportation Engineering; Journal of Transport Geography; Journal of Urban Management; Journal of Urban Planning and Development; Knowledge-Based Systems; Land Degradation & Development; Land Use Policy; Landscape and Urban Planning; National Science Review; Natural Hazards and Earth System Sciences; Nature Cities; Nature Communications; Networks and Spatial Economics; Photogrammetric Engineering and Remote Sensing; PLOS One; Political Geography; Population and Environment; Professional Geographer; Regional Environmental Change; Regional Studies; Remote Sensing Applications: Society and Environment; Science of the Total Environment; Social Network Analysis and Mining; Structural Change and Economic Dynamics; Sustainability; Sustainable Cities and Society; Technology | Architecture + Design; Technology Analysis & Strategic Management; Telematics and Informatics; Tijdschriftvoor Economische en SocialeGeografie (TESG: Journal of Economic and Social Geography); Transactions in GIS; Transactions on Intelligent Transportation Systems; Transactions on Knowledge Discovery from Data; Transactions of the Institute of British Geographers; Urban Geography; Urban Studies; Weather, Climate, and Society

Books: Human Dynamics in the Changing World (Springer), A Diagrammatic Approach to GIS Project Management (Springer), Lecture Notes in Computer Science (Springer), Analyzing Social Media Networks with NodeXL (Elsevier), Business Analytics (McGraw-Hill Education), Urban Remote Sensing (Wiley), Geoinformation Technologies in Environmental Monitoring and Management (Elsevier), Quantitative Methods in Mining Complex Human-Environment Systems (Edward Elgar Publishing Ltd), New Crime Modeling and Mapping Using Geospatial Technologies (Springer), Integrative Remote Sensing for Anthropogenic Disaster Management (Elsevier), Driving the Future: Autonomous Vehicles and AI-Powered Smart Cities (Elsevier)

Conference Session Proposal: AAAS Annual Meeting, IEEE Frontiers in Education Conference

Tenure and Promotion Review: Indiana University, Peking University, State University of New York at Buffalo, Tufts University, University of Idaho, University of Tennessee, Illinois Institute of Technology, University of Hong Kong, Pennsylvania State University, The Chinese University of Hong Kong, Zhejiang University, Lamar University, New Jersey Institute of Technology, New York University, University of California-Riverside, University of Colorado Boulder

Agency Review: the Public Policy Research Institute (PPRI) at Texas A&M University

SERVICE TO DEPARTMENT, COLLEGE, AND UNIVERSITY

2025- The Colloquium Committee, Promotion and Tenure Committee, GIS Committee, AWI Faculty Search Committee, Department of Geography and the Environment, UA

2024   Member, The search committee for Space Faculty Fellow, The Division of Research, TAMU

2023-25   Reviewer, The ADM (Advancing Discoveries to Market) program, The Division of Research, TAMU

2023-25   TAMU Member, Cooperative Research and Development Agreement, US AI Safety Institute Consortium

2023-25   Research Council Member, College of Architecture, TAMU

2023-25   Leader, Generative AI in Research Working Group, TAMU

2023-25   Member, University wide ad-hoc committee that identified strategic research priorities for FY24-25, TAMU

2023-25   Member, The planning committees for strategic initiative workshops including Food-Energy-Water-Health (FEWH) Nexus, Space Exploration, and AI, TAMU

2023   Reviewer, Mills Scholars Program, Texas Water Resources Institute

2023   Reviewer, TAMU & PVAMU - 2023 PRISE grant program

2023   Judge, Water Daze Poster Contest, TAMU

2023   Eminent Scholar Selection Committee, TAMU

2022   Urban Planning Associate/Full Professor Search Committee Co-Chair, LAUP, TAMU

2022-25   Proposal team core member, BS degree in Urban Analytics and Informatics, LAUP, TAMU

2022-25   Co-Coordinator, Urban Hydroinformatics Working Group, TAMU

2022-25   Co-Coordinator, Urban Climate Science Working Group, TAMU

2022   Tenure-Track Faculty Candidate Interview, Department of Environmental and Occupational Health, TAMU

2022   Judge, Student Research Week, TAMU

2021-22   Lead Coordinator, Transportation Data Science Seminar Series, TAMU

2021-22   University Grievance Committee, TAMU

2021   University Award Committee for SEC (Southeastern Conference) Travel Grant, TAMU

2021-25	Promotion and Tenure Committee, College of Architecture, TAMU
2021	Organizing Committee Member, Water for a Livable Texas, Texas Water Resources Institute (TWRI) and TAMU VPR's office
2021	Search Committee for Assistant Professor in robotics, fabrication, and simulation, Department of Architecture, TAMU
2021	Reviewer, ARCC King Medal, College of Architecture, TAMU
2021	Reviewer, Bill Anderson Fund Workshop, TAMU
2020-25	URSC Committee, TAMU
2020	Search Committee for Information Science/Information Technology Assistant/Associate Professor, Department of Informatics, NJIT
2019-20	Strategic Planning Faculty Committee for NJIT 2025, NJIT
2019-20	Data Science and Management Research Cluster Committee, NJIT
2019-20	Diversity Committee, College of Computing, NJIT
2019-20	Data Visualization Certificate Committee, Department of Informatics, NJIT
2018-20	PhD Program Committee, Department of Informatics, NJIT
2019-20	Capstone Project Co-Coordinator, College of Computing, NJIT
2019-20	Faculty Mentor, Albert Dorman Honors College, NJIT
2018	Faculty Judge, HackNJIT, ACM Student Chapter, NJIT
2018	Faculty Mentor, UBS Machine Leaning Competition, NJIT
2018	Colloquium Coordinator, Department of Geography, KSU
2018	Graduate Faculty Representative, College of Arts & Sciences, KSU
2017-18	Faculty Advisory Committee, Department of Geography, KSU
2017	University Commencement Committee, KSU
2017	Undergraduate Award Committee, Department of Geography, KSU

2016-18	Academic Hearing Panel, KSU
2016	Lillian Friedman Award and David B. Smith Award Committee, KSU
2015-18	Paper judge, Annual Graduate Symposium on Research, KSU
2015	Master of GIS Planning Committee, Department of Geography, KSU
2014-18	Serve as the lead delegate to UCGIS by getting KSU into this important national GIS organization
2014-15	East Lakes AAG Organization Committee for 2015, KSU
2014	University Fellowship Review Committee, KSU
2014-18	Paper judge, Annual Undergraduate Symposium on Research, KSU
2014-18	Annual Beck Research Award Committee, Department of Geography, KSU
2013-18	GIS Curriculum Committee, Department of Geography, KSU
2012-13	Geospatial Advisory Committee, School of Earth, Environment, and Society, BGSU
2012-13	Search Committee for Remote Sensing Assistant/Associate Professor, School of Earth, Environment, and Society, BGSU
2011	Co-advise Website Development for Department of Geography, BGSU
2010-13	Geospatial Curriculum Committee, School of Earth, Environment, and Society, BGSU

LEADERSHIP TRAINING

Foundations of Leadership for the Aspiring Leader through Texas A&M University System, North American Training and Development Inc., 2023

Geography Faculty Development Alliance (GFDA) Department Leadership Workshop, American Association of Geographers, 2023

SELECTED MEDIA COVERAGE

Ethics of AI-Enhanced Planning by American Planning Association
https://planning.org/blog/9306489/ethics-of-ai-enhanced-planning/

Urban planning professor named youngest distinguished scholar by geography org

https://www.arch.tamu.edu/news/2025/03/11/urban-planning-professor-named-youngest-distinguished-scholar-by-geography-org

Dr. Xinyue Ye Speaks with NALEO on Artificial Intelligence
https://www.arch.tamu.edu/news/2024/10/02/dr-xinyue-ye-speaks-with-naleo-on-artificial-intelligence/

Throwing Shade at Heatwaves
https://engineering.tamu.edu/news/2024/09/throwing-shade-at-heatwaves.html

Twinning: Research Aims to Optimize Aggie Commutes and Class Times
https://today.tamu.edu/2024/08/19/twinning-texas-am-research-aims-to-optimize-campus-commutes-and-class-times/

Texas A&M hopes to launch an online 3D model of campus that could help students navigate the campus and more
https://theeagle.com/news/a_m/tamu-plans-3d-model-of-campus-for-students/article_4c5fabf2-5e6b-11ef-8d30-df74ac34a00e.html

Researchers work to create 3D digital twin of campus to optimize class times and locations (Phys.org)
https://phys.org/news/2024-08-3d-digital-twin-campus-optimize.html

Researchers use 3D visualization to predict, prevent hurricane damage by UN Office for Disaster Risk Reduction (UNDRR) and also by The Weather Channel (headquarters located in Atlanta, Georgia)
https://www.preventionweb.net/news/researchers-use-3d-visualization-predict-prevent-hurricane-damage

Researchers Use 3D Visualization to Predict, Prevent Hurricane Damage
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The Eyes Inside the Storm
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TAMIDS Project Broadens Access to NASA's Earth Information System Through AI-based Query Translation
https://tamids.tamu.edu/2023/06/19/tamids-project-uses-ai-to-broaden-availability-of-nasa-earth-science-information/

KAMU's "Texas A&M Today" about AI in Research
https://www.pbs.org/video/ep-2-innovation-at-texas-am-lrknzi/

PVAMU and Texas A&M Announce Faculty Winners of $400K Joint PRISE Research Grants For 2022

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Xinyue Ye has been named a Fellow in the American Association of Geographers.
https://www.directionsmag.com/pressrelease/11309

Computational Urban Science and UN Sustainable Development Goals (SDG) 11 (sustainable cities and communities)
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Planning prof, research team developing digital models to evaluate coastal resiliency plans
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TAMIDS & College of Architecture receive Microsoft grant on AI for humanitarian action
https://tamids.tamu.edu/2021/08/19/ms-ai-humanitarian/

Early concept shows how AI could help give urban planners, designers ground-level insight into flood resiliency
https://kinder.rice.edu/urbanedge/2021/07/145/geospatial-ai-flood-resiliency

AI Software Will Help Regional Planners Build Sidewalks Database
https://news.njit.edu/ai-software-will-help-regional-planners-build-sidewalks-database

$1 million NSF Grant Awarded to Develop Open Knowledge Network:
https://informatics.njit.edu/news/njit-professors-awarded-nsf-grant-develop-open-knowledge-network

Three Kent Researchers Land Grant to Develop City Planning Software:
https://www.kent.edu/research/ye-zhao-xinyue-ye-andrew-curtis

Avoiding the Crush | News | Communications of the ACM: http://m.cacm.acm.org/news/201876-avoiding-the-crush/fulltext?from=singlemessage&isappinstalled=0

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Kent State Researchers to Study Social Media Use During Crises and Disasters
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Best of 2012, Bowling Green State University (Among Five)

BGSU economic center receives national award, Sentinel-Tribune

PROFESSIONAL MEMBERSHIPS

American Association of Geographers
American Association for the Advancement of Science
Association for the Advancement of Artificial Intelligence
American Geophysical Union
Association of Chinese Scholars in Computing
Association of Collegiate Schools of Planning
Association for Computing Machinery
Institute of Electrical and Electronics Engineers
International Association for China Planning
International Association of Chinese Professionals in Geographic Information Science
International Association of Urban Climate
Modeling Geographical Systems Commission, International Geographical Union
Royal Geographical Society (with IBG)