Rui Li - Curriculum Vitae

1400 Washington Ave, AS 217 **ALBANY, NY 12222**

https://www.albany.edu/geographyplanning/faculty/rui-li

EDUCATION

The Pennsylvania State University

2012

TEL: 518-442-4651

FAX: 518-442-3374

rli4@albany.edu

Ph.D. Department of Geography

Committee: Roger Downs; Alexander Klippel; Alan MacEachren; & Luke Zhang

University of Saskatchewan

2007

M.A. Department of Geography

Supervisor: Scott Bell

Wuhan University

2005

B.Sc. Department of Cartography and Geographic Information System

EMPLOYMENT

Associate Dean for Social Sciences

2025 - present

College of Arts and Sciences, University at Albany

Visiting Professor

Jun - Aug 2024

Institute for Geography, University of Augsburg

Department Chair

2024

Associate Professor &

2020-2024

Director of Master of Science in Geographic Information Science

Department of Geography and Planning, University at Albany, USA

Research Associate

Center for the Elimination of Minority Health Disparities (CEMHD)

Center for Social and Demographic Analysis (CSDA)

Assistant Professor 2014-2020

Department of Geography and Planning, University at Albany, USA

Research Associate & Substitute Professor

2012-2014

Institute for Geoinformatics, University of Muenster, Germany

PUBLICATIONS (* denotes student co-author)

Refereed journal articles

- 1. Fuest, S.* & Li, R. (in preparation). Structure of spatial knowledge: A comparison of sketch maps between German and American Cities. Cartographic Perspectives.
- 2. Friedman, S., Fang, C., Yang, T., Li, R., Hossain Mithu, I, Manganello, J. Xiaobo Romeiko, X., & Lin, S. (under review) An Ecological Portrait of the Vulnerability of

- Older-Adult Neighborhoods in New York State. *International Journal of Environmental Research and Public Health*
- 3. Huang, Y., Li, Y., **Li, R.**, & Zhang, K. (2024). The privilege of working from home and health disparities during the covid-19 pandemic in major American cities. *Health and Place*. DOI: /10.1016/j.healthplace.2024.103183
- 4. **Li, R.** (2023) Augmented reality landmarks on windshield and their effects on the acquisition of spatial knowledge in autonomous vehicles, *Journal of Location Based Services*, DOI: 10.1080/17489725.2023.2238661
- 5. Li, Y., Huang, Y., **Li, R.**, & Zhang, K. (2023). Historical redlining and park use during the COVID-19 pandemic: Evidence from big mobility data. *Journal of Exposure Science & Environmental Epidemiology*, 1-8.
- 6. **Li, R.,** Erickson, D.*, Belcaid, M.*, Chinedu, M. F.*, & Akanbi, O. O.* (2023) A tale of two cities: COVID-19 vaccine hesitancy as a result of racial, socioeconomic, digital, and partisan Divides. *ISPRS International Journal of Geo-Information*, 12(4), 158.
- 7. Fuest, S.* & Li, R. (under review). Structure of Spatial knowledge: A Comparison of Sketch Maps between German and American Cities. *Annals of Association of American Geographers*.
- 8. Kim, A.* & Li, R. (2022). Perceiving Landmarks on Small Mobile Maps: Roles of Visual Variables in the Acquisition of Spatial Knowledge. *Interdisciplinary Journal of Signage and* Wayfinding, 6(2), 17-30.
- 9. **Li, R.** & Huang, Y. (2022). COVID-19 and Minority Health Disparities in New York City: A Spatial and Temporal Perspective. *Environment and Planning B: Urban Analytics and City Science*. DOI: 10.1177/23998083221126525
- 10. Huang, Y. & Li, R. (2022). The lockdown, mobility, and spatial health disparities in COVID-19 pandemic: A case study of New York City. Cities: The International Journal of Urban Policy and Planning. 122. DOI: 10.1016/j.cities.2021.103549
- 11. **Li, R.** (2021). Visualizing COVID-19 information for public: Designs, effectiveness, and preference of thematic map. *Human Behavior and Emerging Technologies*. 3(1), 97-106. DOI: 10.1002/hbe2.248
- 12. Huang, Y. & Li, R. (2021). Stay-at-Home Order and Spatial Disparities in COVID-19 Pandemic in New York City. *Understanding and eliminating minority health disparities in a 21st-century pandemic: A White Paper Collection*. University at Albany, SUNY: Scholars Archive.
- 13. **Li, R.** & Huang, H. (2020). Staying orientated in wayfinding: A comparison of orientation between English and Mandarin speakers. Geo*Journal*. DOI: 10.1007%2Fs10708-020-10242-z
- 14. **Li, R.** & Huang, H. (2020) Visual access formed by architecture and its influence on visitor's spatial exploration in a museum. *Interdisciplinary Journal of Signage and Wayfinding*, 4(1), 49-59. doi: 10.15763/issn.2470-9670.2020.v4.i1.a55

- 15. **Li, R.** (2020). Mapping beyond the screen of mobile devices: Enhancing spatial awareness through visualized off-screen landmarks. *Annals of American Association of Geographers*. doi: 10.1080/24694452.2019.1670611
- 16. Schwering, A., Li, R., & Anacta, V. J. A. (2017). Wayfinding through orientation. *Spatial Cognition and Computation: An Interdisciplinary Journal*, 7(4), 273-303. doi:10.1080/13875868.2017.1322597.
- 17. Anacta, V. J. A., Schwering, A., **Li, R.**, & Muenzer, S. (2017). Orientation information in wayfinding instructions: Evidence from human verbal and visual instructions. *GeoJournal*, 82(3), 567-583. doi:10.1007/s10708-016-9703-5.
- 18. Li, R. & Zhao J*. (2016). Resizing off-screen landmarks on mobile devices: Levels of measurement and the perception of distance. *KI Künstliche Intelligenze (Journal on Artificial Intelligence*), 31(2), 141-149. doi:10.1007/s13218-016-0471-7
- 19. **Li, R.**, & Klippel, A. (2016). Wayfinding Behaviors in Complex Buildings: The Impact of Environmental Legibility and Familiarity. *Journal of Environment and Behavior*. 48(3), 482-510. doi:10.1177/0013916514550243 (first-online version released in 2014)
- 20. Yang, J., Klippel, A. & **Li, R.** (2015). The cognition of change: scaling deformations in mind and spatial theories. *Journal of Cartography and Geographic Information Science*. 42(3), 224-234. doi:10.1080/15230406.2014.991425
- 21. **Li, R.**, Korda, A.*, Radtke, M.*, & Schwering, A. (2014). Visualizing distant off-screen landmarks on mobile devices to support spatial orientation. *Journal of Location Based Services*. 8(3), 166-178. doi: 10.1080/17489725.2014.978825
- 22. Schwering, A., Wang, J. Chipofya, M., Shib, J., **Li, R.** & Broelemann, K. (2014). SketchMapia: Qualitative representations for the alignment of sketch and metric maps. *Spatial Cognition and Computation: An Interdisciplinary Journal*. doi: 10.1080/13875868.2014.917378
- 23. Wang, J., & Li, R. (2013). An empirical study on pertinent aspects of sketch maps for navigation. *International Journal of Cognitive Informatics and Natural Intelligence*. 7(4), 26-43. doi: 10.1109/ICCI-CC.2012.6311138
- 24. Klippel, A., Wallgrün, J. O., Yang, J., **Li, R.**, & Dylla, F. (2012). Formally grounding spatio-temporal thinking. *Journal of Cognitive Processing*. 13(1), 1-6. doi: 10.1007/s10339-012-0451-2
- 25. Li, R., & Klippel, A. (2012). Wayfinding in libraries: Can problems be predicted? *Journal of Map and Geography Libraries*. 8(1), 21-38. doi: 10.1080/15420353.2011.622456
- 26. Klippel, A., Hardisty, F., & **Li, R.** (2011). Interpreting spatial patterns: An inquiry into formal and cognitive aspects of Tobler's first law of geography. *Annals of the Association of American Geographers*. 101(5), 1011-1031. doi: 10.1080/00045608.2011.577364

27. Klippel, A., Hardisty, F., **Li, R.,** & Weaver, C. (2009). Color enhanced star plot glyphs – Can salient shape characteristics be overcome? *Cartographica*. 44(3), 217-232. doi: 10.3138/carto.44.3.217

Chapters in edited books

- 1. Wang J. & Li, R. (2018). Reassessing underlying spatial relations in pedestrian navigation: A comparison between sketch maps and verbal descriptions. In *Emerging Investigations in Artificial Life Research and Development*. IGI Global: Hershey.
- 2. Bartoschek, T., Schwering, A., **Li, R.** & Muenzer, S. & Carlos, V. (2018). OriGami A mobile geogame for spatial literacy. In O. Ahlqvist & C. & Schlieder (Eds.), *Geogames and Geoplay: Game-based Approaches to the Analysis of Geo-Information* (pp. 37-62), Springer: Cham, Switzerland.

Refereed conference proceedings

- Li, R. & Zhao, J. (2023) The Impact of Simulation Modes on Acquiring Spatial Knowledge through Augmented Reality Landmarks on Windshield. In Huang, H., Van de Weghe, N., and Gartner, G.(Eds), Proceedings of the 18th International Conference on Location Based Services. LBS 2023, 20-22 November 2023, Ghent, Belgium. DOI: 10.34726/5400
- Li, R. (2022). Acquisition of spatial knowledge with augmented reality display on windshield in autonomous vehicles. In Krisp, Meng, Kumke, & Huang (Eds), Proceedings of the 17th International Conference on Location Based Services (2022). Munich, Germany.
- 3. Anacta, V. J. A., **Li, R.**, Löwen, H., De Lima Galvao, M., & Schwering, A. (2018). Spatial distribution of local landmarks in route-based sketch maps. In S. Creem-Regehr, J. Schöning, & A. Klippel (Eds.), Spatial Cognition XI. Spatial Cognition 2018 (Vol. Lecture Notes in Computer Science, pp. 107-118). Cham: Springer.
- Wang, J. & Li, R. (2018). Sketch maps and verbal descriptions in structuring space. Proceedings of the 21st AGILE Conference on Geographic Information Science. Lund, Sweden.
- 5. **Li, R.**, Anacta, V.J.A. & Schwering, A. (2017). Can you follow your own route directions? How familiarity and spatial abilities influence spatial performance and sketch maps. In Barkowsky T. et al (Eds) *Spatial Cognition X* (pp. 38-52). Springer: Cham, Switzerland.
- 6. **Li, R.** (2016). Effects of visual variables on the perception of distance in off-screen landmarks: Size, color value, and crispness. In G. Gartner & H. Huang (Eds) *Progress in Location-Based Services* (pp. 89-103) Springer: Cham, Switzerland.
- 7. Fuest, S.*, **Li, R.** & Schwering A. (2015). Navigating on web maps: Route characteristics and performance. Proceedings of the 18th AGILE Conference on

- Geographic Information Science. Lisbon, Portugal.
- 8. Schwering, A, **Li**, **R.**, & Anacta, V.J.A., (2014). The use of local and global landmarks across scales and modes of transportation in verbal route instructions. Proceedings of the 2014 International Conference on Spatial Cognition. Bremen, Germany.
- 9. Anacta, V.J.A, Schwering, A, & Li, R. (2014) Determining hierarchy of landmarks in spatial descriptions. Proceedings of the 8th International Conference on Geographic Information Science. Vienna, Austria.
- 10. **Li, R.**, Fuest, S.*, & Schwering A. (2014). The effects of different verbal and route instructions on spatial orientation. Proceedings of the17th AGILE Conference on Geographic Information Science. Castellon, Spain.
- 11. Schwering, A, Muenzer, S. Bartoschek, T., & Li, R. (2014) Gamification for spatial literacy: The use of a desktop application to foster map-based competencies. Proceedings of the Workshop on Geogames and Geoplay at the 17th AGILE Conference on Geographic Information Science. Castellon, Spain.
- 12. Schwering A, **Li**, **R.**, & Anacta, V.J.A. (2013) Orientation information in different forms of route instructions. Proceedings of the 16th AGILE Conference on Geographic Information Science, Leuven, Belgium (**Best paper award**).
- 13. Kray, C., Fritze H., Fechner, T., Schwering, A., **Li, R.**, & Anacta, V.J.A. (2013). Transitional spaces: Between indoor and outdoor spaces. In T. Tenbrink et al (Eds.), Spatial Information Theory: Proceedings of the 11th International Conference, COSIT 2013 (pp. 14-32). Springer: Berlin
- 14. Bartoschek, T., Schwering, A., & Li, R. (2013). Ori-Gami An app fostering spatial competency development and spatial learning of children. Proceedings of the 16th AGILE Conference on Geographic Information Science, Leuven, Belgium.
- 15. Klippel, A., **Li, R.**, Yang, J., Hardisty, F., & Xu, S. (2012). The Egenhofer-Cohn Hypothesis: Or, Topological Relativity? In M. Raubal, A. U. Frank, & D. M. Mark (Eds.), Cognitive and Linguistic Aspects of Geographic Space New Perspectives on Geographic Information Research (pp. 195–215). Springe: Berlin
- 16. **Li, R.**, Klippel, A., & Yang, J. (2011). Geographic event conceptualization: Where spatial and cognitive sciences meet. In L. A. Carlson, C. Hölscher, & T. F. Shipley (Eds.), Proceedings of the 33rd Annual Conference of the Cognitive Science Society. (pp. 3168–3173). Austin, TX: Cognitive Science Society.
- 17. Klippel, A., Xu, S., Li, R. & Yang, J. (2011) Spatial event language across geographic domains. Proceedings of the Workshop on Computational Models of Spatial Language Interpretation and Generation in conjunction with CogSci 2011, Boston, USA, July 20, 2011, Vol: 759, p. 40-47. CEUR-WS.org, ISSN 1613-0073.
- 18. **Li, R.**, & Klippel, A. (2010). The differences of space syntax methods on explaining wayfinding behaviors: A preliminary comparison. Proceedings of the International Conference on Spatial Cognition 2010 (pp. 58-61), Mt. Hood, OR.

- 19. Li, R., & Klippel, A. (2010). Using formal descriptions of environments to understand wayfinding behaviors: the differences between methods. Proceedings of the workshop of Environmental Modeling: Using Space Syntax in Spatial Cognition Research held at International Conference on Spatial Cognition 2010 (pp. 93-107), Mt. Hood, Oregon
- 20. Klippel, A., **Li, R.**, Hardisty, F., & Weaver, C. (2010). Cognitive invariants of geographic event conceptualization: What matters and what refines? In S. I. Fabrikant, T. Reichenbacher, M. Kreveld & C. Schlieder (Eds.), Proceedings of the 6th International Conference of GIScience, Zurich, Switzerland, (pp. 130-144). Springer: Berlin
- 21. **Li, R.,** & Klippel, A. (2010). Using space syntax to understand knowledge acquisition and wayfinding in indoor environments. In F. Sun, Y. Wang, J. Lu, B. Zhang, W. Kinsner & L. A. Zadeh (Eds.), Proceedings of the 9th IEEE International Conference on Cognitive Informatics 2010 (pp. 302-307). Beijing, China, IEEE
- 22. Klippel, A., & **Li**, **R**. (2009). The endpoint hypothesis: A topological-cognitive assessment of geographic scale movement patterns. In K. Stewart Hornsby, C. Claramunt, M. Denis, & G. Ligozat (Eds.), Spatial Information Theory, Proceedings of 9th International Conference on Spatial Information Theory, Aber Wrac'h, France, September 21-25, 2009 Proceedings (pp. 177–194). Springer: Berlin (**Best Paper**)
- 23. **Li, R.**, & Bell, S. (2009). Is the development of environmental knowledge sequential or simultaneous in human wayfinding? In R. E. Sieber (Ed.), Proceedings of the 2009 Spatial Knowledge and Information Canada Conference, (Vol. 1). Fernie, BC.
- 24. Klippel, A., **Li, R.**, Wu, A., & Zhang, X. (2008). Interactive, multiscale you-are-here maps. In A. Klippel & S. C. Hirtle (Eds.), You-Are-Here Maps: Creating a Sense of Place through Map-like Representations. Proceedings of the Workshop held in conjunction with the International Conference Spatial Cognition 2008, September 15-19, 2008, Freiburg, Germany (pp. 11–20).
- 25. **Li, R.**, & Bell, S. (2008). The order of developing environmental knowledge in human wayfinding, Proceedings of the fifth Conference on Geographic Information Science, Park City, Utah.

Conference presentations

- 1. Wang, M., **Li, R.**, and Zhao, J. (2024) Comparing the acquisition of spatial knowledge through augmented reality landmarks on windshield: Online vs. Virtual Reality. The 16th Conference on Spatial Information Theory. Quebec City, QC, Canada.
- 2. Li, R. (2023). Acquiring Spatial Knowledge in in Autonomous Vehicles Using Augmented Reality Landmark Display on Windshield. Presentation at the Annual Meeting of the American Association of Geographers, Denver, CO.
- 3. Li, R. (2022). Spatial and Temporal Disparities of COVID-19 Patterns in New York City. Poster presented at the Annual Meeting of the American Association of Geographers, New York, NY (virtual).

- 4. **Li, R.** & Huang, Y.* (2021). Spatiotemporal disparities of COVID-19 outcome in New York City neighborhoods: Influences of mobility, public transit, race, and social vulnerability. Poster presented at the international symposium on Geospatial approaches to combating Covid-19 at the 30th International Cartographic Conference, Florence, Italy.
- 5. **Li, R.** & Fuest, S.* (2021). Wayfinding Directions in U.S. and German cities: A Comparison of Qualitative Aspects in Sketch Maps for Supporting Spatial Orientation. Poster presented at the Annual Meeting of the American Association of Geographers, Seattle, WA (virtual).
- 6. **Li, R.** & Kim, A.* (2019). Where is upstate New York? Cognitive validation of New York's categorization of regions. Presented at the Annual Meeting of the American Association of Geographers, Washington DC.
- 7. Kim, A.* & Li, R. (2018). Visual Variables on Mobile Devices: An Empirical Investigation of Their Roles on Spatial Awareness. Presented at the Annual Meeting of the American Association of Geographers, New Orleans, LA (Best Student Paper & Student Travel Award)
- 8. **Li, R.** (2017). Off-screen Landmarks on Mobile Devices: Interaction and Perception of Distance. Presented at the Annual Meeting of the American Association of Geographers, Boston, MA
- 9. Tompkin, C.* & Li, R. (2016). Evaluation of signage placement on university campus using space syntax. Presented at the Annual Meeting of the Middle States Division of the American Association of Geographers. Altoona, PA. (**Best Student Paper**, **2**nd)
- Zhao, J.* & Li, R. (2016). Visualizing distance objects on mobile phones: Choice of resizable icons. Presented at the 19th Symposium on Automatic Cartography, Albuquerque, New Mexico.
- 11. **Li, R**. (2016) Cognitive-driven design: enriching spatial intelligence in both geospatial technologies and users. Presented at Research Challenges for next 10 years at 2016 University Consortium of Geographic Information Science. Scottsdale, AZ.
- 12. **Li, R.** (2016) Environment form, familiarity, and spatial abilities on perceiving spatial descriptions: An early exploration. Presented at the Pennsylvania & Friends Spatial Cognition Symposium. State College, PA
- 13. Li, R. & Zhao, J.* (2016) Visualizing off-screen landmarks for direction and distance on mobile devices. Presented at the Annual Meeting of the Association of American Geographers, San Francisco, CA. (Student Travel Award)
- 14. Zhao, J.*, & Li, R. (2015) Using resizable icons to visualize distant landmarks on mobile devices. Presented at the 2015 New York State Geospatial Conference. Albany, NY
- 15. **Li, R.,** Schwering, A., Korda A.* & Radtke, M.* (2015) Supporting cognitive wayfinding with displayed off-screen landmarks on mobile systems. Presented at the Annual

- Meeting of the Association of American Geographers, Chicago, IL.
- 16. **Li, R.**, Klippel, A., Liben, L. S., & Christensen, A. E. (2012). Indoor spatial awareness: Impacts of environmental quality, individual differences, and mobility. Presented at the Annual Meeting of the Association of American Geographers, New York, NY
- 17. Gilliam, C., Li, R., Chorman, B., Yang, J., & Klippel, A. (2011). Placement of you-arehere maps: An empirical study using multiple approaches. Presented at the annual meeting of North American Cartographic Information Society (NACIS). Madison, WI.
- 18. **Li**, **R.**, & Klippel, A. (2011). Impacts of environment, spatial abilities, and familiarity on wayfinding behaviors in buildings. Presented at the Annual Meeting of the Association of American Geographers, Seattle, WA.
- 19. **Li, R.** (2010). Using salient environmental characteristics to improve wayfinding and spatial awareness Presented at the Doctoral Colloquium at the International Conference on Spatial Cognition 2010, Mt. Hood, OR.
- Li, R., & Klippel, A. (2010). Making wayfinding literacy: Incorporating salient landmarks in wayfinding aids. Presented at the Annual Meeting of the Association of American Geographers, Washington D.C.
- 21. **Li, R.**, Klippel, A., & Andrew, P. (2009). Stuck in the stacks: Assessing and improving wayfinding in the Pattee and Paterno libraries. Presented at the SirsiDynix Northeast Regional Group Conference, University Park, PA.
- 22. **Li**, **R**. (2009). Using schematic maps to improve wayfinding in complex buildings. Presented at the doctoral colloquium held at the Conference of Spatial Information Theory, **Aber Wrac'h**, **France**.
- 23. Li, R., & Klippel, A. (2009). Wayfinding behaviors in complex environment. Presented at the Annual Meeting of the Association of American Geographers. Las Vegas, NV.
- 24. **Li, R.** (2009). Stuck in the Stacks: Wayfinding problems in complex buildings. Presented at the Annual Meeting of Middle Sates Division of Association of American Geographers, New Paltz, NY.
- 25. **Li**, **R.**, & Bell, S. (2008). Human wayfinding strategies in an unfamiliar environment: Using different kinds of environmental knowledge. Presented at the Annual Meeting of the Association of American Geographers. Boston, MA.
- 26. Li, R. (2008). A generalization framework for cartographic multi-representation on small display: Combining cognitive approach in building feature generation. In K. C. Clarke (Ed.), Proceedings of Automatic Cartography 2008, the 17th International Research Symposium on Computer-based Cartography, September 8-11. Shepherdstown, WV: CaGIS and ESRI.

OTHER SCHOLARLY ACTIVITIES

- 1. Li, R. & Lenhof, H. (2023). ARCExplorer: Albany Rural Cemetery Explorer App Development [iOS App]. Albany, NY: Department of Geography and Planning and Albany Rural Cemetery.
- Li, R., & Kappel, J. (2021). Capital Region COVID-19 Vaccination Planner [WebApp]. Capital Region COVID-19 Vaccination Task Force. Albany, NY: Capital Region Vaccine Network.
- 3. **Li, R.**, & Kappel, J. (2021). Capital Region Weekly Vaccination Progress Public Viewer [WebApp]. Capital Region COVID-19 Vaccination Task Force. Albany, NY: Capital Region Vaccine Network.
- 4. **Li**, **R**. (2020). New York State COVID-19 Cases Tracker [WebApp]. Department of Geography, University at Albany.
- 5. **Li, R.** (2019) ARCE: Albany Rural Cemetery Explorer, a cross-platform location-based services to support exploring local heritage and American history of capital region.
- 6. **Li, R.** (2016) Tunnel Orienter, an Android-based orientation prototype to visualize distant locations on mobile phones in UAlbany campus tunnel.

Invited talks

- 1. Geographic Information Science and Public Health? Invited guest lecture given at School of Public Health, University at Albany, 2022 2024.
- 2. What is geographic information? Freshman Seminar given at Department of Atmospheric Science, University at Albany, 2017 2020.
- 3. How visual variables work on mobile platform for inferring distance and direction? Talk given at School of Resources and Environmental Science, Wuhan University, Wuhan, Hubei, China. June 12, 2018.
- 4. Geospatial analysis in urban architecture design. Talk given at the Design Academy, Sichuan Fine Arts Institute. Chongqing, China. Jun 1st, 2018.
- 5. Mapping beyond the screens: Visualizing direction and distance to distant landmarks. Keynote speech given at the 2017 GeoMundus Conference. Muenster, Germany. Nov 11, 2017.
- Using ArcGIS to support design in landscape and architecture design. Talk given at the Department of Architecture Art, Sichuan Fine Arts Institute. Chongqing, China. Jun 8th, 2017.
- 7. Visualizing distance of off-screen landmarks on mobile devices: Visual variables and their effects. Talk given at Institute for Geoinforatics GI Forum. Muenster, Germany. Jun 7, 2016.
- 8. Spatial information science in art design. Talk given at the Design Academy at the Sichuan Fine Arts Institute. Chongqing, China. Dec 7, 2015

- 9. Orientation wayfinding: A new paradigm of providing wayfinding instructions with landmarks. Talk given at the Research group of Geoinformatics and Cartography at Technical University of Vienna. Vienna, Austria. Apr 23, 2014.
- Spatial orientation in wayfinding: Influential factors and utilization in wayfinding instructions. Talk given at the Center for Cognitive Science Colloquium, University of Freiburg, Germany. Jan 23, 2014
- Impacts of architectural intelligibility and individual differences on indoor wayfinding behaviors. Talk given at Institute for Geoinformatics GI Forum. Muenster, Germany. Oct, 2012.
- 12. Why do we get lost in buildings? Penn State Geography Coffee Hour. University Park, PA. Nov 4, 2011.
- 13. Still stuck in the stacks: The factors of getting lost in libraries. The Pennsylvania State University Pattee and Paterno Libraries Special Presentation. University Park, PA. March 24, 2012.
- 14. Stuck in the stacks: Assessing and improving wayfinding in the Pattee and Paterno Libraries' buildings. The Pennsylvania State University Pattee and Paterno Libraries Brown Bag. University Park, PA. May 1, 2009.

FUNDED AND PENDING PROJECTS

- Leveraging photovoice and geospatial artificial intelligence to better understand environmental service workers' perceptions and their impact on key hospital performance indicators. Co-PI. Department of Health and Human Services/SUNY Upstate Medical University. 2025-2027. \$241,704 (pending)
- 2. Early-Life Residence in Redlined Neighborhoods and Later-Life Mortality: A Novel Analysis of HOLC Grades and CenSoc-Numident Data. Co-Pl. National Institutes of Health. 2025-2027. \$452,394 (pending).
- 3. Historical Redlining and 1940 Census Data: A Pilot Study to Build a Critical Geographic Infrastructure. Co-Pl. Faculty Research Award Program. UAlbany. 2004-2005. \$3, 995
- 4. Applying GIS Technologies to Enhance History Tourism and Family Heritage Research at the Albany Rural Cemetery Phase III, Pl. Bender Family Foundation. 2023-2026. \$45, 000.
- 5. Redlining Policy and Later-Life Mortality: An Exploratory Analysis of the Linked HRS-1940 Census Data. Co-Pl. Center for Aging and Policy Studies Pilot Grant. 2022-2023. \$39, 991.
- 6. Mobility and Spatial Health Disparities in the COVID19 Pandemic in New York Metropolitan Area. Co-PI, President's COVID-19 and Minority Health Disparities Seed Funding Program, University at Albany. 2021-2022. \$7, 600

- 7. Spatial and Social Disparities of COVID-19 outcome in New York City Neighborhood, Co-PI, Engaged Researcher Grant funded by Center for Technology in Government at University at Albany. 2020-2021. \$5,720
- 8. Applying GIS Technologies to Enhance History Tourism and Family Heritage Research at the Albany Rural Cemetery, PI. Bender Family Foundation. 2018-2022. \$39, 800.
- 9. Transferring geospatial data into information for generating knowledge. European Union Erasmus Mundus Program Fellowship through University of Muenster, Jul Aug 2017 -2020. \$20, 000
- Assessing the Changed Role of Drivers in Self-driving Vehicles and Effects of Augmented Reality Display on Windshield. Pl. Faculty Research Award Program of University at Albany, 2018-2020. \$2,000
- 11. Innovating navigation systems across transportation modes: Support navigation and spatial orientation through implementing landmark-based hierarchical guidance. PI, Faculty Research Award Program of University at Albany, 2015-2017. \$4,000

TAUGHT COURSES

State University of New York at Albany

GOG 592 GIS Project Development

Spring 2022, 2021, 2020, 2019, 2018

GOG427Y/527 USP427Y PLM527 Human Factors in Geographic Information Science

Spring 2018, 2017, 2016, 2015

GOG106 USP106 Introduction to Geospatial Technologies

Spring 2022, 2021, 2020, 2019, 2018

GOG 406/530 Topics in Geography: Technical Geography

Spring 2017, 2016, 2015

GOG 290 Introduction to Cartography

Fall 2022, 2021, 2020, 2019, 2018, 2017, 2016, and 2015

GOG498/597 USP457 PLN557 Advanced Geographic Information System

Fall 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, and 2014

Institute for Geoinformatics, University of Muenster

Geospatial technologies: Transferring data to knowledge

Summer 2021, 2020, 2019, 2018, 2017, and 2016

Spatial Cognition

Summer 2014, 2013, and 2012

Digital Cartography

Summer 2014 and 2013,

Wayfinding and Navigation

Winter 2013 and 2012

The Pennsylvania State University

Mapping Our Changing World
Mapping Our Changing World (Online)

Introduction to Remote Sensing (TA) Spatial Analysis (TA)

MENTORING

Student supervised (only thesis-based students listed)

Ph.D.

Mohammed Imaduddin Humayun (2017, University of Muenster, external disseration examiner)

Master students

Madison Hrysko (2022, University at Albany, thesis advisor)

Andrew Kim (2018, University at Albany, thesis advisor)

Stefan Fuest (2017, University of Muenster, thesis co-supervisor), currently Ph.D. student at University of Hannover

Yutian Feng (2016, University at Albany, thesis committee member)

Jiayan Zhao (2016, University at Albany, thesis advisor), Ph.D. received at The Pennsylvania State University in 2020.

Amichi Korda (2014, University of Muenster, thesis supervisor)

Nemanja Kostic (2014, University of Muenster, thesis supervisor)

Undergraduate students

Stefan Fuest (2015, University of Münster, bachelor thesis supervisor)

Marius Runde (2015, University of Münster, bachelor thesis supervisor)

Maurin Radtke (2014, University of Münster, bachelor thesis supervisor)

Jens Balmert (2014, University of Münster, bachelor thesis supervisor)

Leon Vogel (2014, University of Münster, bachelor thesis supervisor)

Student awards received

Falon Treis (2021): Graphics Award, National Institute of Statistical Sciences SAID in Graphics Data Visualization Individual Competition

Falon Treis (2020): **Best student paper award**, 2nd place at the Middle State Division of American Association of Geographers.

Andrew Kim (2018): **Master thesis research grant** of American Association of Geographers; **Best paper award** in Cartography Specialty Group Honors Paper Competition; **Student**

Travel award in Environmental Perception and Behavioral Geography Specialty Group; **Professional deveopment award**, UAlbany Graduate Student Association.

Jiayan Zhao (2016): **Master thesis research grant** received from American Association of Geographers; **Full Research Assistantship** received from The Pennsylvania State University for Ph.D.; **Professional deveopment award,** UAlbany Graduate Student Associatoin

Carl Tompkin (2016): **Best Student paper**, 2nd place at the Middle State Division of American Association of Geographers.

Jeremy Oles & Matt Brandirchin (2015): **Honorable mention**, Blackstone Launchpad Business Plan Challenge.

SERVICE

Department

GIS Day Planning Committee, Lead, Department of Geography and Planning, State University of New York at Albany. Fall 2021

GIS Day Planning Committee, Department of Geography and Planning, State University of New York at Albany. Fall 2019

MSGIS Admission Committee, Department of Geography and Planning, State University of New York at Albany. 2017 – present

Lead in new undergraduate Minor in GIS, Department of Geography and Planning, State University of New York at Albany. Fall 2018 – Spring 2019

Website Committee, Department of Geography and Planning, State University of New York at Albany. 2016 – present

Substitute director for Undergraduate GIS Certificate Program, Spring 2017.

Department Search Committee for Administrative Manager, Department of Geography and Planning, State University of New York at Albany. 2014

Summer School Committee, Institute of Geoinformatics, University of Muenster. 2014
GeoInformatics Graduate School Advisory Board, Institute of Geoinformatics, University of Muenster. 2013-2014

Erasmus Mundus Master of Geotechnologies Advisory Board, Institute of Geoinformatics, University of Muenster. 2013-2014

Department representative, University Open House or Accepted Student Open House. 2014-present

College

Faculty Council & Academic Programs Committee, College of Arts and Science, University at Albany. 2016-2018

University

The Council on Libraries, Information Systems, and Computing, University Senate, University at Albany. Fall 2018-present

Campus Building Naming Advisory Work Group, University at Albany, Fall 2018 – Spring 2019

Selection Committee for Excellence in Librarianship Award, University Libraries, University at Albany. Spring 2019

State

GIS State Agency Advisory Committee, New York State, Fall 2020 – present

National or international professional organizations

Program Committee, Symposium on Location-Based Services. 2016, 2018, 2020 **Academic Advisor**, Cartography Specialty Group, American Association of Geographers. 2016–present.

Academic Advisor, Environmental Perception and Behavioral Geography Specialty Group, American Association of Geographers. 2015-present.

Session Chair & Organizer, Cognition, Behavior, and Design Sessions I, II, III, IV at American Association of Geographers 2015 Annual Meeting. 2015

AWARDS	
Honorary Award for Distinguished Community Engagement University at Albany	2022
Faculty Travel Award University at Albany, State University of New York	2014-2017
Best Paper Award , the 16 th AGILE (Association of Geographic Information Laboratories for Europe) Conference on Geographic Information Science Short Paper Program	2014
European Union Erasmus Teaching Mobility Grant for teaching exchange at University of Jaume I, Castellon, Spain, European Commission	2013
 Best Student Paper, Saarinen Student Paper Competition, American Association of Geographers EPBG Special Group Student Travel Award, American Association of Geographers Educational Technology Services Graduate Assistantship, The Pennsylvania State University Honorable Mention, College of Earth and Mineral Science Graduate Poster Exhibition, The Pennsylvania State University 	2012
EPBG Special Group Student Travel Award, American Association of Geographers Rodney Erickson Funds and Gregory Knight Fun, Department of Geography, The Pennsylvania State University Penn State Geography Graduate Assistantship	2011
SFB/TR8 Spatial Cognition Travel Award for Spatial Cognition 2010 University of Freiburg and University of Bremen	2010

Honorable Mention, College of Earth and Mineral Science Graduate Poster Exhibition, The Pennsylvania State University EPBG Special Group Student Travel Award, American Association of Geographers Ruby S. Miller Endowment Fund in Geography for academic enrichment, Department of Geography, Penn State **Penn State Geography Graduate Assistantship** 2009 Best Paper Award, International Conference on Spatial Information Theory, Aber Wrac'h, France NextGen Research Grant, Pattee and Paterno Libraries. The Pennsylvania State University EPBG Special Group Student Travel Award, American Association of Geographers 2008 Ruby S. Miller Endowment Fund in Geography for academic enrichment, Department of Geography, Penn State **Penn State Geography Graduate Assistantship** Best Student Paper, Saarinen Student Paper Competition, American Association of Geographers EPBG Special Group Student Travel Award, American Association of Geographers Ruby S. Miller Endowment Fund in Geography for academic enrichment, Department of Geography, Penn State Penn State Geography Graduate Assistantship 2007 Google Summer of Code Internship, Google 2nd place, Elaine F. Bosowski Student Paper Award, Pennsylvania Geographical Society **Penn State Geography Graduate Assistantship** 2005-2006 **Graduate Teaching Fellowship**, University of Saskatchewan **Graduate Teaching Scholarship**, University of Saskatchewan 2002-2005 University of Scholarship, Wuhan University

PROFESSIONAL AFFILIATIONS

Memberships

American Association of Geographers (2007-present) Canadian Association of Geographers (2005-2006)

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