

Dr. Rina Ghose
rghose@uwm.edu

Employment

Full Professor (2014-present), Department of Geography University of Wisconsin-Milwaukee. Program Director: BSDA/MSDS degrees, Northwestern Mutual Data Science Institute, UWM. Faculty affiliate: Urban Studies, Asian Studies.

Associate Professor (2006- 2014), Department of Geography, University of Wisconsin-Milwaukee. Faculty affiliate: Master of Sustainability Peacebuilding Program, Urban Studies program, Global Studies program, GIS certification program.

Dhaliwal Assistant Professor (2003-2006), Department of Geography, University of Wisconsin-Milwaukee. Faculty affiliate: Urban Studies program, Global Studies program, GIS certification program.

Assistant Professor (1998-2003), Department of Geography and Geology, Illinois State University

Education

Ph.D. Geography, 1998, University of Wisconsin-Milwaukee. Specializations: GIS, Demography, Urban Policy and Planning, Social Theory, Qualitative Methods.

M.A., Geography, 1993, University of Montana. Cartography and GIS, Statistics, Environmental Science, Urban Studies.

B.A. in Geography (Honors), 1988, University of Calcutta (India).
Areas of Concentration: Geomorphology, Climatology, Biogeography, Cartography, Surveying, Statistics. Minors: Education, English Literature.

Areas of Specialization

Geomatics and Geospatial technologies, ICT, Data Science and Data Analytics, Population and Health, Urban Planning, Human-Environmental Interactions, Qualitative and Quantitative methods, Community-engaged Research.

Research Projects in Progress

1. Precision epidemiology and the opioid crisis: Using next generation geospatial analyses to guide community level responses in diverse and segregated metropolitan areas. PI: Dr. J. Mantsch (Florence Williams Professor and Chair Department of Pharmacology & Toxicology, Medical College of Wisconsin), Dr. R. Ghose (Professor, Geography, UWM) and P. Brunzelle (Project WisHope). Funded by Foundation for Opioid Response Effort. \$600,000.

2. Structural Discrimination and Health Outcomes in Milwaukee at the Community and Individual Level. P.I. Dr. deRoon Cassini (Professor of Trauma & Acute Care Surgery, Psychiatry & Behavioral Medicine, Institute for Health and Equity, Medical College of Wisconsin), Dr. J. Mantsch (Professor and Chair, Pharmacology & Toxicology, MCW), Dr. R. Ghose (Professor, Geography, UWM), Dr. L. Torres, (Professor, Psychology, Marquette University) and Social Development Commission), J. Harris (Social Development Commission). Research funded by AHW Program, Medical College of Wisconsin. \$200,000.
3. COVID-19 related Social Media Disinformation and Health Impacts in USA (with graduate advisee A. Forati)
4. Social Media Analysis for Assessing Environmental Inequalities during Hurricane Irma (with graduate advisee A. Forati and Dr. B. Dixon, University of South Florida).
5. Status of Women in Geography: A Nationwide Survey, sponsored by the SWG specialty group and the American Association of Geographers (AAG).
6. Food Insecurity and Dietary Health Disparities in American Cities
7. Community gardens, Green Infrastructure and Sustainable Smart Cities

Peer-Reviewed Journal Publications

- 2022 Ghose, R., Forati, A. and Mantsch, J. *Impacts of Covid-19 Pandemic on Opioid Overdose Deaths: A Spatiotemporal Analysis*. Journal of Urban Health. <https://doi.org/10.1007/s11524-022-00610-0>
- 2022 Forati, A. and R. Ghose, *Examining Community Vulnerabilities through Multi-Scale Geospatial Analysis of Social Media Activity during Hurricane Irma*. International Journal of Disaster Risk Reduction. 68, 102701, 1-16. <https://doi.org/10.1016/j.ijdrr.2021.102701>
- 2022 Forati, A., R. Ghose, F. Mohebbi, J. Mantsch. *The Journey to Overdose: Using Spatial Social Network Analysis as a Novel Framework to Study Geographic Discordance in Overdose Deaths*. Drug and Alcohol Dependence Journal (in review)
- 2022 Forati, A. and R. Ghose, *Volunteered Geographic Information Users Contributions Pattern and its Impact on Information Quality*. Spatial Information Research (In Review)
- 2022 Ghose, R. Forati, A. Hansen, R. *Covid-19 related Social Media Misinformation and its Impacts*. International Journal of Geographic Information (In review)

- 2021 Ghose, R. *Justice and the American City*. Urban Geography Journal. 42 (10): 1406-1409. <https://doi.org/10.1080/02723638.2021.1940713>
- 2021 Forati, A., Ghose, R. and Mantsch, J. *Examining Opioid Overdose Deaths Across Communities Defined by Racial Composition: A Multiscale Geographically Weighted Regression Approach*. Journal of Urban Health. 98 (4): 451-562. <https://doi.org/10.1007/s11524-021-00554-x>
- 2021 Forati, A. and Ghose, R. *Geospatial Analysis of Misinformation in COVID-19 related Tweets*. Applied Geography, 133, 102473.
- 2020 Forati, A. and Ghose, R. *Volunteered Geographic Information Users Contributions Pattern and its Impact on Information Quality*. AutoCarto 2020 Conference Proceedings, Redlands, USA.
- 2020 Ghose, R. and Johnson, P. *Smart Citizens Creating Smart Cities: Locating Citizen Participation in the Smart City*. The Canadian Geographer, vol.64, no. 340-343.
- 2018 Pettygrove M. and Ghose, R. *From “Rust Belt” to “Fresh Coast”:* *Remaking the City through Food Justice and Urban Agriculture*. Annals of the AAG, vol. 108, no. 2, 591-602.
- 2018 Ghose, R. and Welcenbach, T. *‘Power to the People’ Contesting Urban Poverty and Power Inequities through Open GIS*. The Canadian Geographer, vol. 62, no. 1, 67-80.
- 2016 Ghose, R. and S. Appel. *Facilitating Spatial Data Sharing in PPGIS: The role of the University Library*. Cartographic Journal, vol. 53, no.4. 341-347.
- 2016 Kar, B., Sieber, R., Haklay, M. and Ghose, R. *Public Participation GIS and Participatory GIS in the Era of GeoWeb*. Cartographic Journal, vol. 53, no.4, 296-299.
- 2016 Pettygrove M. and Ghose, R. *A Synthesized Framework for Urban Geographies of Food and Dietary Health*. Geography Compass, 10/6, 268-281.
- 2016 Pettygrove, M. and R. Ghose. *Community Engaged GIS for Urban Food Justice Research*. International Journal of Applied Geospatial Research, vol.7, no.1, 16-29.
- 2014 Ghose, R. and Pettygrove, M. *Actors and Networks in Urban Community Gardens*. Geoforum, vol. 53, 93–103

- 2014 Ghose, R. and Pettygrove, M. *Urban Community Gardens as Spaces of Citizenship*. Antipode, vol. 46, no. 4, 1092-1112.
- 2013 Mukherjee, F. and Ghose, R. *E-Planning through Municipal GIS in India*. International Journal of E-Planning and Research, vol.2, no. 2, 24-39.
- 2013 Book Review: Virtual Migration-The Programming of Globalization. Urban Geography, May Issue.
- 2012 Mukherjee, F. and Ghose, R. *Exploring the Complexities of Community Engaged GIS*. International Journal of Applied Geospatial Research, Vol.3, no. 4, 87-102.
- 2012 Day, P. and Ghose, R. *E-Planning through the Wisconsin Land Information Program: The Contexts of Power, Politics and Scale*. International Journal of E-Planning Research, vol. 1, no. 1, 75-89.
- 2011 Mukherjee, F. and Ghose, R. *Tracing the Historic Trajectory of GIS Development and its Impacts on Contemporary Practice*. Journal of Urban Technology, vol.18, no.5, 141-158.
- 2010 Lin, W. and Ghose, R. *Social Construction of GIS in China's Changing Urban Governance: The Case of Shenzhen*. Cartographica, vol. 45, no. 2, 89-102.
- 2009 Mukherjee, F. and Ghose, R. *Complexities in GIS Spatial Knowledge Production in Dane County, Wisconsin*. Cartography and Geographic Information Science, vol. 36, no. 4, 299-314.
- 2008 Lin, W. and Ghose, R. *Complexities in Sustainable Provision of GIS for Urban Grassroots Organizations*. Cartographica vol.43, no.1.
- 2007 Ghose, R. *Politics of Scale and Networks of Association in PPGIS*, Environment and Planning A vol. 39. 1961-1980.
- 2005 Ghose, R. *Complexities of Citizen Participation through Collaborative Governance*. Space and Polity, vol. 9, no.1, 61-75.
- 2004 Ghose, R. *Big Sky or Big Sprawl? Rural Gentrification and the Changing Cultural Landscapes of Missoula, Montana*, Urban Geography, vol. 25, no. 6, 528-549.
- 2004 Elwood, S. and R. Ghose. *PPGIS in Community Development Planning: Framing the Organizational Context*. Cartographica, vol. 38, # 3&4,

Fall/Winter, 19-33. Published in March 2004, but publication date given as 2001 due to backlog.

- 2003 Ghose, R, and S. Elwood. *Public Participation GIS and Local Political Context: Propositions and Research Directions*. URISA Journal (Urban and Regional Information Systems Association), vol. 15, APA II, 17-24.
- 2003 Ghose, R. *Public Participation GIS in Neighborhood Revitalization Context*. Geospatial Today, vol. 1, issue 6, 24-28.
- 2003 Ghose, R. *Investigating Community Participation, Spatial Knowledge Production and GIS Use in Inner City Revitalization*. Journal of Urban Technology, 10(1), 39-60.
- 2003 Adams, P. and R. Ghose. *India.com: Construction of a Space Between*. Progress in Human Geography, no. 27, 414-437.
- 2002 Ghose, R. and W.E. Huxhold. *Role of Multi-Scalar GIS-based Indicators Studies in Formulating Neighborhood Planning Policies*. URISA Journal, vol. 14, no. 2, 5-17.
- 2001 Ghose, R. *Use of Information Technology for Community Empowerment: Transforming Geographic Information System into Community Information Systems*. Transactions in GIS, vol. 5, no.2, 141-163.
- 2001 Ghose, R. and W.E. Huxhold. *Role of Local Contextual Factors in Building Public Participation GIS: The Milwaukee Experience*. Cartography and Geographic Information Science, vol. 28, no. 3, 195 - 208.
- 1995 Martin, M., J. Myers, R. Ghose. *GIS and Neighborhood Planning: A Model for Revitalizing Communities*. URISA Journal, vol.7, no.2, 63-67.
- 1994 Ghose, R. *Using G.I.S. to Analyze Housing Shortage Situation*. Annual Conference Proceedings, Vol. I, URISA, p.509-516.

Peer Reviewed Conference Proceedings

- 2022 Forati, A. Ghose, R., Mantsch, J. *Examining Journey to Overdose Using Spatial Social Network Analysis*, AutoCarto 2022 Conference Proceedings.
- 2021 Ghose, R., Forati, A. and Hanson R. *Analyzing Twitter Generated Covid-19 Misinformation: A Mixed Methods Approach*. International Symposium on Geospatial Approaches to Combating Covid-19. International Cartographic Conference Proceedings.

- 2020 Forati, A and Ghose, R. *Volunteered Geographic Information Users Contributions Pattern and its Impact on Information Quality*. Auto Carto 2020 Conference Proceedings.
- 2019 Forati, A and Ghose, R. *Participation Level in OSM (case study: Tehran, London, Los Angeles)*. ACM Collective Intelligence Conference Proceedings.
- 2012 Ghose, R. *Qualitative GIS in Urban Justice Research*. Extended abstract (1500 words), International GIScience Conference Proceedings.
- 2008 Ghose, R. *Politics of Scale and Networks of Association in Public Participation GIS*. Extended abstract (1500 words), International GIScience Conference Proceedings.
- 2004 Ghose, R. *Complexities in Spatial Knowledge Production in Public Participation GIS*. Extended abstract, *International GIScience 2004 Conference Proceedings*, p. 96-98.
- 2000 Ghose, R. *Critical Perspectives on Public Participation GIS*. Extended abstract, *International GIScience 2000 Conference Proceedings*, p. 330 – 331.
- 1994 Ghose, R. *Using G.I.S. to Analyze Housing Shortage Situation*. *Annual Conference Proceedings*, Vol. I, URISA, p.509-516.

Invited Book Chapters

- 2018 Ghose, R. and Pettygrove M. *Urban Community Gardens as New Spaces of Living*. Book chapter in *Handbook on Spaces of Urban Politics*, edited by Andrew Jonas, Byron Miller, Kevin Ward and David Wilson (Routledge). p.320-335.
- 2018 Ghose, R. *Defining Public Participation GIS*. Edited by B. Huang, B. (Ed.), *Comprehensive Geographic Information Systems*. Vol. 1, pp. 431–437. Oxford: Elsevier.
- 2017 Ghose, R. *Public Participation GIS* (6000 words). *International Encyclopedia of Geography: People, the Earth, Environment, Technology*. Edited by the Association of American Geographers (John Wiley), Vol. X, pp. 5403-54013.
- 2011 Ghose, R. *Politics and power in the use of GIS for community decision making*. Book chapter in *Handbook of GIS and Society Research*, edited

by Timothy Nyerges, Helen Couclelis, Robert McMaster (SAGE publications), p.423-438.

- 2011 Elwood, S. and Ghose, R. 2011. *Reflection Essay: PPGIS in Community Development Planning*. Book chapter in *Classics in Cartography: Reflections on Influential Articles from Cartographica*, edited by Martin Dodge (John Wiley & Sons, UK), p. 107-118.
- 2011 Ghose, R. *Middle Class Migration and Rural Gentrification in Western Montana*. Book chapter in *City Dreams and Country Schemes: Utopian Visions of the Twentieth Century American West*, edited by Kathleen Brosnan and Amy Scott (University of Nevada Press), p. 109-130.
- 2009 Ghose, R. *GIS and Citizen Participation: Urban Revitalization Projects in the U.S.* Book chapter in *Organizational Facets of GIS*, edited by Stephane Roche and Claude Caron (John Wiley & Sons, U.S.), p.269-280.
- 2004 Ghose, R. *SIG et Participation Cityonne: Des Project des Revitalisation Urbaine aux Etats-Unis*. Book chapter in “Aspects Organisationnels des SIG”, edited by Stephane Roche and Claude Caron (Hermès Sciences), p.255-266.
- 2004 Ghose, R. and W.E. Huxhold. *Role of Multi-Scalar GIS-based Indicators Studies in Formulating Neighborhood Planning Policies*. Book chapter in “Community Indicators Measuring Systems”, edited by Rhonda Phillips (Ashgate Publishing Ltd.), p.157-177.

Textbook Chapters

- 2012 Brunn, S., R. Ghose and M. Graham. *Cities of the future*. Book chapter in “Cities of the World: World Regional Urban Development”, 5th edition, edited by Stanley Brunn, Maureen Hayes Mitchell, Donald Zeigler, (Rowman & Littlefield), p.557-596.
- 2008 Brunn, S., R. Ghose and M. Graham. *Cities of the future*. Book chapter in “Cities of the World: World Regional Urban Development”, 4th edition, edited by Stanley Brunn, Maureen Hayes Mitchell, Donald Zeigler, (Rowman & Littlefield).
- 2003 Brunn, S. and R. Ghose. *Cities of the future*. Book chapter in “Cities of the World: World Regional Urban Development”, 3rd edition, edited by Stanley Brunn, Jack Williams, Donald Zeigler, (Rowman & Littlefield), p.489-519.

Grant Applications and Awards

- 2022 Structural discrimination and health outcomes in Milwaukee at the community and individual level. P.I. T. deRoon Cassini (Division of Trauma & Acute Care Surgery, MCW), R. Ghose (Geography, UWM), J. Mantsch (Pharmacology & Toxicology, MCW), L. Torres (Psychology, Marquette), C. Weiss (Health and Equity, MCW) and Jennifer Harris (Social Development Commission). \$200,000. Funded by Advancing Healthier Wisconsin Program, Medical College of Wisconsin.
- 2022 Precision epidemiology and the opioid crisis: Using next generation geospatial analyses to guide community level responses in diverse and segregated metropolitan areas. PI: J. Mantsch (Medical College of Wisconsin), R. Ghose (UWM), P. Brunzelle (Project WisHope). Funded by Foundation for Opioid Response Effort (FORE). \$600,000.
- 2020 A data-guided community-targeted response to the drug overdose crisis in Milwaukee County. LOI submitted, Population and Community Health Studies, Medical College of Wisconsin. M. O'Brien, MCW (PI). Co-PI: J. Mantsch (MCW), R. Ghose (UWM). Unfunded.
- 2020 Addressing Milwaukee's opioid crisis: A data driven approach. PI: R. Ghose, J. Mantsch, P. Maduraju, Northwestern Mutual Data Science Institute. \$15,000. Funded.
- 2019 Preparing the landscape for a digitalized water world. NSF Smart and Connected Communities Program Solicitation, NSF 19-564. M. Silva (P.I.), Co-PI: T. Boyer, C. Galambos, R. Ghose, J. Zhang. (Unfunded).
- 2019 Coastal flooding: An integrative analysis of impacts on coastal communities and SWOT analysis of communication for successful coastal adaptation and resilience. LOI, Army Corp of Engineers. PI: B. Dixon (University of South Florida). Co-PI: R. Ghose (UWM), R. Johns (USF), D. Smoak (USF) (Unfunded).
- 2018 Embodied text of regional indigenous languages group. C21 Collaboratory Program, UWM. Funded
- 2012 Instructional grant for online GIS course development. University of Wisconsin-Milwaukee. Funded.
- 2009 Investigating citizen participation in privatized collaborative planning in Inner-City Milwaukee. University of Wisconsin-Milwaukee Graduate School Research Committee Award. Funded.

- 2007 Investigating participation of Inner-City nonprofit organizations in collaborative governance. UWM Faculty Nonprofit Sector Research, Helen Bader Institute for Nonprofit management. Funded.
- 2001 Investigating empowerment, marginalization and public participation GIS. Illinois State University Research Grant Program. Funded.
- 2000 Counterurbanization and rural gentrification in the Rocky Mountain region. Illinois State University Research Grant. Funded.
- 1996 'A Realtor Runs Through It': Rural gentrification and the changing cultural landscape of Missoula, Montana. National Science Foundation Dissertation Improvement Grant. Funded.

Professional Honors, Awards, and Distinctions

- 2019 Fellow, Community Geography Workshop, University of Georgia and National Science Foundation.
- 2013 Transdisciplinary Research Fellow, Center for 21st Century Studies, UWM
- 2012 Senior Research Fellow, Center for Information Policy Research, School of Information Studies, UWM, 2012-2013.
- 2006 Graduate School/UWM Foundation Excellence in Research Award. Recognized as one of five faculty members at UWM (across rank/disciplines) for outstanding research productivity.
- 2004 Fellow, Center for 21st Century Studies, University of Wisconsin – Milwaukee, 2004-2005.
- 2003 Dhaliwal Professorship Award, University of Wisconsin-Milwaukee.
- 1997 Graduate School Dissertation Fellowship Award. University of Wisconsin-Milwaukee.
- 1996 Graduate School Dissertation Fellowship Award. University of Wisconsin- Milwaukee
- 1996 Invited Membership, Phi Kappa Phi National Honor Society.
- 1995 Graduate School Fellowship Award. University of Wisconsin-Milwaukee.
- 1993 First Prize Award, M.A. Thesis *Regionalizing the Central Business District by Studying Land Use Intensities*. Social Science Division, 76th

Annual Conference of the Pacific Division of the American Association for the Advancement of Sciences (AAAS).

Invited Speaker

- 2020 Invited speaker, iCAR Phase VI Workshop, “*Tech Fix: How can technology help us investigate, communicate and solve climate problems and foster resilience?*” University of South Florida St. Petersburg, USA, 2020.
- 2019 Invited participant, Spatial Data Science Symposium, University of California-Santa Barbara. Position Paper: *Societal Implications of Spatial Data Science*.
- 2019 Invited speaker. *Right to the City and Critical GIS*. Department of Geography, University of Georgia
- 2019 Invited speaker. ‘*Beet the System*’: *Contesting Food Injustice in the Neoliberal City*. Department of Geography, University of Oregon
- 2019 Invited speaker. *Advancing Right to the City through Critical GIS*, Department of Geography and Urban Studies, University of British Columbia
- 2019 Keynote speaker. *Addressing Right to the City through Critical GIS*, Brian Coffey Lecture, Urban Studies, University of Washington-Tacoma.
- 2019 Invited speaker. *Community Information Systems to Support Urban Planning*. Community Geography Workshop. Sponsored by NSF and University of Georgia
- 2018 Invited speaker. *Food and Health Inequalities in the Neoliberal City*, Zilber School of Public Health, University of Wisconsin-Milwaukee
- 2018 Keynote speaker. *Citizen Science, Community Empowerment and Open GIS*, Citizen Science GIS workshop, Department of Sociology, University of Central Florida. Funded by National Science Foundation.
- 2018 Invited speaker. *Contesting Food and Health Inequalities in Milwaukee*, Department of Urban Planning, UWM
- 2016 Invited speaker. *Citizen Participation and GIS Use in Urban India*. Dynamic Mapping of Secondary Cities Symposium, Center for Geographic Analysis, Harvard University.

- 2016 Invited speaker. *'May the Subaltern Speak'?* *Deep Mapping and PPGIS in Urban Food Justice Research*. 'The Spatial Turn in Digital Humanities' workshop, West Virginia University.
- 2016 Plenary speaker. *Towards a Feminist GIS*. "#Feminist In(ter)ventions: Women, Community, Technology", 22nd Women's Studies Conference, Southern Connecticut State University, New Haven, Connecticut.
- 2016 Invited speaker. *Contesting Food Injustice in the Neoliberal Era: Examining grassroots volunteerism, urban agriculture and Web 2.0 GIS based analysis*. Department of Sociology, University of Central Florida
- 2015 Invited speaker. *Promoting Diversity and Inclusion in Geography*. Plenary session at the Geography Faculty Development Alliance Workshop, University of Connecticut, sponsored by Association of American Geographers.
- 2015 Invited mentor. Leader/co-leader of eight sessions on junior faculty mentoring at the Geography Faculty Development Alliance Workshop, University of Connecticut, sponsored by Association of American Geographers.
- 2015 Invited speaker. *Public Participation GIS in Urban Revitalization*. Department of Geology and Geography, West Virginia University.
- 2014 Invited speaker. *GIS in Community Decision Making*. Department of Geography, DePaul University.
- 2013 Invited speaker. *Urban Community Gardens as Spaces of Citizenship*. Department of Geography, University of Copenhagen.
- 2012 Invited speaker. *Power, Politics and GIS in Community Decision Making*. Center for Urban Studies, University of Amsterdam.
- 2012 Invited speaker. *Addressing Urban Deprivation and Inequalities through Public Participation GIS*. Information Flows in Urban Governance Symposium, Amsterdam, Netherlands. Funded by Netherlands National Science Foundation. Scientific partners: University of Amsterdam, Department of Geography, Planning and international Development Studies; ITC, University of Twente.
- 2012 Invited speaker. *Bridging the Geospatial Divide through Public Participation GIS*. Center for Information Policy research, University of Wisconsin-Milwaukee.

- 2011 Invited speaker. *Empowerment and Marginalization in Public Participation GIS*. Department of Geography, Syracuse University.
- 2009 Invited speaker. *Public Participation GIS in the Context of Inner-City Revitalization*. Newberry Library, Chicago.
- 2009 Invited speaker. *Power to the people? Politics of power in Public Participation GIS*. Department of Geography, University of California-Berkeley.
- 2009 Invited speaker. *Citizen Participation and Spatial Knowledge Production in 'inner-city' Milwaukee*. Yi-Fu Tuan Lecture Series, Department of Geography, University of Wisconsin – Madison.
- 2008 Invited speaker. *Complexities of PPGIS in the Urban Revitalization Context*. Department of Geography, University of Southern California.
- 2007 Invited speaker. *Unpacking the Complexities of Urban PPGIS*. PPGIS E-Seminar organized by University Consortium of GIS/Royal Geographical Society/Institute of British Geographers and Quantitative Methods Research Group/ Joint Worldwide Universities Network.
- 2007 Invited speaker. *Politics of Scale and Networks of Association in Public Participation GIS*. School of Architecture and Urban Planning, University of Wisconsin-Milwaukee
- 2006 Invited speaker. *PPGIS in the Urban Revitalization Context*. Department of Geography, University of Illinois at Urbana-Champaign.
- 2004 Invited speaker. *Exploring Public Participation GIS*. Department of Geography, McGill University.
- 2003 Invited speaker/participant, *PPGIS in the Urban American Context*. Workshop on Companies, Organizations and SIG”, Angers, France. Sponsored by University of Angers, France and Laboratory of Geobusiness, University of Sherbrooke, Canada. “Companies, Organizations and SIG”, workshop organized and funded by University of Angers, France and Laboratory of Geobusiness of the University of Sherbrooke, Canada.
- 2001 Invited speaker/participant, *Investigating the Role of Local Contextual Factors in PPGIS*. Access and Participatory Approaches in Using Geographic Information Workshop. Organized by the University Consortium for Geographic Information Science and Association of Geographic Information Laboratories in Europe, Spoleto, Italy. Funded by National Science Foundation, USA and European Science Foundation.

- 2000 Invited speaker. *Investigating Public Participation GIS: Critical Perspectives*. Department of Geography, University of Minnesota.
- 2000 Invited speaker. *Building Public Participation GIS through University/Community Partnerships*. Department of Urban Planning, University of Illinois, Urbana-Champaign.
- 2000 Invited speaker. *Public Participation GIS: Critical Perspectives*. Department of Geography-Geology, Illinois State University.
- 1999 Invited Speaker. *Use of information technology for community empowerment: Transforming geographic information systems into community information systems*. International Conference on Geographic Information and Society. Sponsored by AAG, University of Minnesota. Funded by National Science Foundation. Minneapolis, Minnesota.
- 1999 Invited speaker. *'A Realtor Runs Through It': Rural Gentrification in the American West*. Department of Geography-Geology, Illinois State University.
- 1997 Invited speaker. *Public Access to Information Technology: Strategies for Neighborhood Planning*. Department of Geography, University of Montana.

Academic Conference/ Symposium Presentations

- 2022 *Impacts of Covid-19 pandemic on Opioid Overdose Death: A Bayesian Interrupted Time-Series Analysis*. Forati, A. and Ghose, R. American Society of Photogrammetry and Remote Sensing (ASPRS) Annual Conference, March 21 - 25, 2022.
- 2022 *Impacts of Covid-19 pandemic on Opioid Overdose Death. Geospatial Health Research Symposium: Geography, Substance Use and Addiction 1*, Forati, A. and Ghose, R. Annual Conference of the AAG, New York, USA, 2022 (<https://aag-annualmeeting.secure-platform.com/a/gallery/rounds/27/details/12707>)
- 2021 *Analyzing Twitter Generated Covid-19 Misinformation: A Mixed Methods Approach* (with A. Forati and R. Hansen). International Symposium on Geospatial Approaches to Combating Covid-19. International Cartographic Conference, 2021 (Hybrid). Florence, Italy.
- 2021 *Examining Opioid Overdose Deaths Across Communities Defined by Racial Composition: A Multiscale Geographically Weighted Regression*

- Approach (with A. Forati, J. Mantsch)*. Poster Presentation at the 83rd Annual Scientific Meeting of College on Problems of Drug Dependence, (virtual).
- 2021 *Addressing the Opioid Crisis in Milwaukee County, WI: Using Data to Drive Action* (with Amir Forati). Towards Computational Praxis for Social Justice II Session. Annual Conference of the Association of American Geographers (AAG) (virtual).
- 2021 Invited Panelist. Towards Computational Praxis for Social Justice. Session I. AAG, (virtual).
- 2021 Invited Panelist. (Un)Mapping Social and Spatial Inequality. University Consortium of GIS Annual Conference (virtual).
- 2020 *Volunteered Geographic Information Users Contributions Pattern and its Impact on Information Quality* (with Amir Forati). AutoCarto 2020 Conference (virtual).
- 2020 *Examining Environmental Inequalities Through Social Media Analysis: Case Study Hurricane IRMA* (with Amir Forati). iCAR Phase VI Workshop, University of South Florida St. Petersburg, USA, 2020.
- 2019 *Societal Implications of Spatial Data Science: Spatial Data Science Symposium* at University of California-Santa Barbara. Dec. 9-11, 2019.
- 2019 *'Beet the System': Food Activism in the Neoliberal City*. Annual Conference of the Urban Affairs Association, Los Angeles.
- 2019 *Bharat.Com. Smart Nation Building through GIS and E-Governance*. AAG annual conference, Washington D.C.
- 2019 Invited Panelist. Three sessions at the AAG annual conference.
- 2018 *Advancing Urban Green Infrastructure through Urban Agriculture and GIS*. AAG annual conference, New Orleans.
- 2016 *'May the Subaltern Speak'? Towards a Constructively Critical Public Participation GIS*. At the annual conference of the AAG, San Francisco.
- 2015 *Deconstructing Citizen Participation and Spatial Knowledge Production*. AAG annual conference, Chicago.
- 2015 Invited Panelist, *Crisis of Civic Engagement in Higher Education* session. AAG annual conference, Chicago.

- 2014 *Open GIS: Research and Educational Agendas*, AAG pre-conference workshop on Open GIS, Tampa, Florida
- 2014 *Locational Privacy Concerns: Geotagged data mining from social media*. AAG annual conference, Tampa, Florida.
- 2014 *Framing Food Access: Knowledge Production and Approaches to Dietary Health Inequities* (with Margaret Pettygrove). AAG annual conference, Tampa, Florida.
- 2013 *Approaches to Community-Engaged GIS in Urban Food Justice Research* (with Margaret Pettygrove), University Consortium of GIS (UCGIS) annual conference.
- 2012 *Qualitative GIS in Urban Justice Research*. International Conference on Geographic Information Science, Ohio State University.
- 2012 *Challenges to Qualitative PPGIS in the Context of Neoliberalization*. AAG annual conference, New York.
- 2011 *Resistance, Complicity, and Conditional Citizenship through Urban Community Garden* (with Margaret Pettygrove), Annual Critical Geography Mini Conference, Clarke University.
- 2011 Invited Panelist, Critical GIS session, annual AAG West Lakes Conference
- 2010 Invited Panelist, Critical GIS session and Shadow-State Thesis session. Annual Critical Geography Mini Conference, University of Wisconsin-Milwaukee
- 2010 *Spaces of Resistance: Urban Community Gardens in Inner-City Milwaukee* (with Margaret Pettygrove), Annual Critical Geography Mini Conference, University of Wisconsin-Milwaukee.
- 2009 Invited Panelist. *Geographic Information Ethics and GIScience*. AAG annual conference, Las Vegas.
- 2008 *Examining the Complexities of Collaborative Urban Governance through a Scaled Network Approach*. AAG annual conference, Boston.
- 2008 *Politics of Scale and Networks of Association in PPGIS*. 5th International Conference on Geographic Information Science, Park City, UT, September 23-26

- 2007 *Developing a Community Information System to Assist Neighborhood Revitalization Efforts* (with Brian Thayer). AAG annual conference, San Francisco.
- 2007 *Qualitative Methodologies: Investigating GIS use for Urban Governance* (with Falguni Mukherjee). AAG annual conference, San Francisco.
- 2007 Invited Panelist. *Research design and methodologies for critical GIS research*. AAG annual conference, San Francisco.
- 2007 Invited Panelist. *Stereotypical Ideologies/Iconoclastic Ethnographies*. AAG annual conference, San Francisco.
- 2006 *Neoliberalism and Politics of Scale in Urban Governance: The Case of Milwaukee*. AAG annual conference, Chicago.
- 2006 *Politics of Scale and Networks of Associations in Public Participation GIS*. Royal Geographical Society- Institute of British Geographers' Annual International Conference.
- 2006 *Complexities in Spatial Knowledge Construction in Urban Community Organizations* (with Wen Lin). AAG annual conference, Chicago.
- 2006 Invited Panelist. *Participatory GIS Session*, AAG annual conference, Chicago.
- 2005 *Politics of Scale in Public Participation GIS*. AAG annual conference, Denver.
- 2005 *Investigating GIS Provision for Urban Grassroots Community Organizations – The Role of Politics of Scale and Scaled Networks* (with Wen Lin). AAG annual conference, Denver.
- 2005 Invited Panelist. *Community Mapping Session*. AAG, Denver.
- 2005 Invited Panelist. *Foundations and Prospects for Participatory Geographic Information Science Session*, AAG, Denver.
- 2004 *Complexities in Spatial Knowledge Production in Public Participation GIS*. International GIScience conference, Park City, Utah.
- 2004 *Framing the Organizational Context in PPGIS*, Annual URISA Public Participation GIS Conference, Madison, WI.
- 2004 *Investigating Public Participation GIS through Qualitative Methods*. AAG annual conference, Philadelphia.

- 2004 *Complexities in Collaboration: GIS, Indigenous People and Inner-City Revitalization*. AAG, Philadelphia.
- 2003 *Role of Local Political Context in Public Participation GIS*. Annual URISA Public Participation GIS Conference, Portland, OR.
- 2003 *Thoughts on PPGIS Sustainability*. Annual URISA Public Participation GIS Conference, Portland, OR.
- 2003 *Politics of Citizen Participation in Neighborhood Revitalization and PPGIS*. AAG annual conference, New Orleans.
- 2002 *Altering Participation and Power through Neighborhood Strategic Planning: The Case of Milwaukee*. AAG annual conference, Los Angeles.
- 2002 Discussant, *Critical Public Participation GIS* session. AAG, Los Angeles.
- 2001 *Building Digital Communities in Inner City America: Examining Participation, Power, Local Policy Context and the Network of Institutions*. Digital Communities: Cities in the Information Society Conference, Nov. 4-6, Chicago.
- 2001 *Big Sky or Big Sprawl? Public Policy Responses to Growth, Gentrification and Class Colonization in Western Montana*. AAG annual conference, New York.
- 2001 *India.com: Online Community Formation and the Asian Indian Diaspora*” (with Paul Adams), AAG, New York.
- 2001 Invited Panelist, *Critical Perspectives on Public Participation GIS Session*. AAG, New York.
- 2000 *Critical Perspectives on Public Participation GIS*. International GIScience 2000 conference, Savannah, GA.
- 2000 *Building Public Participatory GIS through University Community Partnerships* (with William Huxhold). AAG annual conference, Pittsburgh.
- 1999 *Democratizing Technology: Role of Educational Institutions*. Annual conference of Urban and Regional Information Systems Association (URISA). Chicago.
- 1999 *Rural Gentrification, Class Colonization and the Changing American Countryside*. AAG, Honolulu.

- 1998 *Rural Gentrification and the Changing Cultural Landscape of Missoula, Montana.* AAG annual conference, Boston.
- 1997 *Cowboys and Cappuccinos: Rural Gentrification in the Rockies.* AAG annual conference.
- 1996 *Rural Renaissance in the American West: A case of Missoula, Montana.* AAG annual conference.
- 1995 *Use of Information Technology as a Strategy for Neighborhood Empowerment.* AAG annual conference, Chicago.
- 1994 *Using GIS to Analyze Housing Shortage Situations.* URISA Annual Conference, Milwaukee.
- 1994 *Project Showcase: Metcalfe Park Neighborhood Residents Association: Housing GIS Project.* URISA, Milwaukee.

Editorial Board Member, Academic Journals

Cartographica; Dialogues in Human Geography; Geography Compass.
Journal of Race, Ethnicity, and the City; International Journal of Participatory Mapping.
International Journal of E-Planning and Research (2012-2019)

Professional Experience

Courses Taught at UWM (two courses per semester)

Urban Studies 944: Research Methods
Geog 934: Urban Geography seminar on citizen participation and neoliberal urban governance (graduate seminar)
Geog 810/910: Research Methods (graduate seminar)
MSP 780: Addressing Environmental Justice through Transdisciplinary and Community Engaged Research Methods (graduate seminar)
Geog 834: GIS and Society graduate seminar (adopted as model course by NSF)
Geog 725/525(U/G): Geographic Information Science
Geog 705/405 (U/G): Cartography
Geog 570/470: Geography of South Asia
Geog 215(U): Introduction to GIS (online and in-class)
Geog 110(U): World Regional Geography
Honors 381 (Honors College Seminar): The Story of Bharat/India: Origins, Philosophies, Cultures

Courses Taught at ISU (three courses per semester)

World Regional Geography

Geography of Asia
Geography of South Asia
GIScience (U/G)

Graduate Research Directed

Committee Chair (Ph.D.)

Fahimeh Mohebbi. 2022-present. Biomedical and Health Informatics, College of Engineering & Applied Science. Co-Chair with Dr. Susan McRoy.

Amir Forati. 2018-present. Geography, College of Letters & Sciences. Dissertation Title: *Social Media Data Applications in GIScience (case studies: natural disaster and public health crisis management)*

Margaret Pettygrove (2011-2016). Geography, College of Letters & Sciences. Dissertation Title: *Food Inequities, Urban Agriculture and the Remaking of Milwaukee, Wisconsin.*

Falguni Mukherjee (2004-2009). Geography, College of Letters & Sciences. Dissertation Title: *GIS and Spatial Technologies for Urban Governance.*

Wen Lin. 2003-2009. Geography, College of Letters & Sciences. Dissertation Title: *Social Construction of GIS in a Non-Western World: The Case of Shenzhen, China.*

Patrice Day. 2004-2012. Geography, College of Letters & Sciences. Dissertation Title: *Access to Spatial Data: Political Power of Legal Control Mechanisms.*

Committee Member

(Ph.D.) Yuchen Zhao (2021-)
(M.A.) Madeline O’dea Fruehe (2022-)

Committee Chair (M.A/M.S.)

Rachel Hansen. 2019-2021. “COVID-19 Misinformation Themes” Geography, College of Letters & Sciences.

Thomas Welcenbach. 2013-2015. Geography, College of Letters & Sciences. Research Papers: *Free and Open-Source Software for Public Participation GIS; Building Community Information Systems for Environmental Stewardship and Urban Agriculture*

Stephen Appel. 2013-2015. Geography, College of Letters & Sciences. Thesis: *Public Geospatial Data in Wisconsin: Information Access, Data Sharing and the University*

Claire Reuning. 2011-2013. M.A. Geography, College of Letters & Sciences. Thesis: *Congolese Cultural Landscapes, Transnational Networks and Identity Formation in Milwaukee*

Margaret Pettygrove. 2009-2011. M.A. Geography, College of Letters & Sciences.
Thesis: *Spaces of resistance: Urban community gardens in Milwaukee.*

Liis Palumets, 2009-2011. Geography, College of Letters & Sciences. Research Paper:
The Data Center as a Spatial Data Provider to Milwaukee Community Organizations.

Jesse Bernhardt, 2006-2008. GIS Internship and Research Paper Supervision.

Brian Thayer. 2004-2008. M.A. Geography, College of Letters & Sciences. Thesis:
Developing a Community Information System to Assist in Neighborhood Planning Efforts

Nicole Wilcum. 2003-2004. GIS Internship and Research Paper Supervision.

Committee Member (Ph.D. Completed)

Ozgur Avci
Jeremia Njeru
George Papakis
Parama Roy
Deanna Schmidt
Jeremy Sorenson
Pragya Srivastava (West Virginia University)
Sandra Zupan

Committee Member (M.A. Completed)

Nadia Bogue
Nicholas DeMarsh
Nick Gates
Rodney Ranken
Stephen Schmidt
Chris Parisey
Wei Xu

Other Research and Teaching Experience

Research Assistant, 1996 (Summer). *Connecting Satellite and Surface Measures of Spring's Onset*, Dr. Mark Schwartz, Geography Department, University of Wisconsin-Milwaukee. Funded by NSF.

Research Assistant, 1995 (Summer). *Connecting Satellite and Surface Measures of Spring's Onset*. PI: Dr. Mark Schwartz, Geography Department, University of Wisconsin-Milwaukee. Funded by NSF.

Research Assistant, 1994 (Summer). *Phenological Model to Predict Peach Maturity from Meteorological Variables*. PI: Dr. Mark Schwartz, Geography Department, University of Wisconsin-Milwaukee. Funded by NSF.

Teaching Assistant 1994 (Spring). Geography 403: Remote Sensing: Environmental and Land Use Analysis. Geography Department, University of Wisconsin-Milwaukee.

Teaching Assistant. 1993-1994. Geography 110: The World: Peoples and Regions. Geography Department, University of Wisconsin-Milwaukee.

GIS Research Assistant. 1993 (Summer). *Montana Taxation Project*. PI: Dr. Kelsey Milner, School of Forestry, University of Montana. Funded by Montana Department of Revenue.

Research Assistant. 1992-1993. Social Science Research Group, University of Montana.

Principal Researcher. 1992 (Summer) *A Study of the Housing Supply of Missoula, Montana*. Funded by Missoula Housing Task Force, led by Mayor Dan Kemmis.

Teaching Assistant. 1992. Thematic Cartography (U/G). Department of Geography, University of Montana.

Teaching Assistant. 1991 (Fall). Introduction to Geography. Department of Geography, University of Montana.

Teaching Assistant. 1991 (Spring). Introduction to Cartography (U/G). Department of Geography, University of Montana.

Teaching Assistant. 1990 (Fall). Thematic Cartography (U/G). Department of Geography, University of Montana.

Professional Service

External reviewer (tenure/promotion to full): University of Central Florida, DePaul University, University of Denver, Macalester College, University of Minnesota-Duluth, University of Missouri, University of New Orleans, University of North Carolina-Charlotte, Ryerson University, Syracuse University, University of Texas-Arlington, University of Waterloo, University of Washington-Tacoma

External reviewer (departmental review): Geography, DePaul University

Special issue co-editor (with Francis Harvey, University of Leipzig; Johannes Flacke, University of Twente; Ryan Burns-University of Calgary), Public Participation GIS Special Issue, *International Journal of Geographic Information*. 2020-21

Special issue co-editor (with Peter Johnson, University of Waterloo), Smart Cities Special Issue, *Canadian Geographer journal*. 2020.

Special issue co-editor (with Bandana Kar, Oakridge National Lab; Muki Haklay, University College London; Renee Sieber, McGill University), Public Participation GIS Special Issue, Cartographic Journal (2016).

Senior panelist, Geography and Spatial Science program for National Science Foundation

Senior panelist, Human Social Dynamics Program for National Science Foundation

Grant Proposal Reviewer (international): National Science Foundation of Switzerland, Austrian Science Foundation, GEOIDE Canada, Agence Nationale de la Recherche of France

Grant Proposal Reviewer, National Science Foundation grant proposals, USA (2003-2019)

Reviewer, 14 articles per year (2004-2020): Annals of the AAG, Antipode, Professional Geographer, Progress in Human Geography, Social and Cultural Geography, International Journal of Geographic Information Science, Transactions of the Institute of British Geographers, Urban Geography, Environment and Planning A, Cartographica, Cartography and GIS, Transactions in GIS, Cities, Acme, URISA journal, Local Government Studies, Journal of Rural Studies, Geoforum and many others.

Mentor, Geography Faculty Development Alliance Workshop, sponsored by AAG (2015)

Program committee member, International GIScience Conference (2020, 2014, 2012)

Program committee member, Public Participation GIS Conference (2004, 2003), sponsored by URISA

Vice chair, Socialist and Critical Geography specialty group, AAG (2020-2018)

Secretary/Treasurer of GIS Specialty Group, Association of American Geographers (2012-2010)

Board member, Wisconsin Geographic Information Coordination Council

Session organizer at many AAG conferences

Community Collaborations and Service

Groundwork Milwaukee (nonprofit environmental organization): Research collaboration, created free customized open-source GIS based Community Information Systems for Groundwork Milwaukee, to help in spatial planning, data analyses. This CIS helped the organization to strategically plan its activities in water management and urban gardening.

Milwaukee Urban Garden: Participated in Milwaukee Water Policy Committee, led by Bruce Wiggins (MUG). Provided free research that examined (i) policy barriers to urban agriculture in Milwaukee (ii) water policy and zoning requirements in three mid-western cities (iii) Cross comparisons between Milwaukee and other cities. This research helped MUG and other partners to contest Milwaukee's policy barriers, creating new urban agriculture zoning regulations. Led to forming new urban agriculture zoning law to facilitate community gardening practices.

Neighborhood House: Free spatial analysis and mapping to advance organizational goals of advancing urban agriculture and environmental restoration.

Urban Ecology Center: Assisted with citizen science projects related to habitat restoration, environmental sustainability.

Harambee Ombudsman Project Inc (CBO): Research collaboration, created free customized Internet GIS based Community Information Systems for Harambee community organization. The CIS provided spatial analysis and visualization, which advanced organizational participation in neighborhood revitalization planning programs hosted by the City Hall, CBGA.

Metcalf Park: customized GIS based Community Information Systems for Metcalfe Park Residents Association, Milwaukee. The ensuing spatial analysis and mapping advanced organizational participation in neighborhood revitalization programs to obtain actions.

Data Center at Nonprofit Center of Milwaukee: Decade long collaboration in GIS analysis and mapping that served 24 inner city community organizations in Milwaukee

University Service, UWM

Member, Faculty Rights and Responsibilities Committee: 2018-2021

Member, Faculty Appeals and Grievance Committee: 2015- 2018

Chair, Faculty Appeals and Grievance Committee: 2017-2018

Member, Vice Chancellor's Global Inclusion and Engagement 'Faculty of Color'

Steering Committee: 2017-2019

Member, Graduate School BRIC Student Recruitment Committee; 2012

Member, School of Information Studies Dean Search Committee: 2012

Information Technology Policy Committee: 2008-2009

International Student and Scholar Services Advisory Board: 2009-2010

Member, Asian Faculty and Students Association

Geography Departmental Service, UWM

Chair, Graduate Program Committee: 2013-2015; 2007-2010

Co-chair, Lectures Committee: 2003-2005; 2017-2021

Chair, Public Relations Committee: 2015-2016
Chair, Dhaliwal Lecture Series - India: 2003-2006
Member, Graduate Program Committee: 2006-2015; 2017-2021
Member, Technology Committee: 2004-2010
Member, GIS symposium Committee: 2011
Member, Faculty Search Committee: 2006, 2007; 2009, 2010
Member, GIS Teaching Associate Search Committee 2012 - 2013
Urban Studies Program Service
Lectures Committee: 2017-2018
Student Affairs Committee: 2007-2009
Grievance and Appeals Committee: 2007-2010

Geography-Geology Departmental Service, Illinois State University

Director, Geography-Geology Computer Laboratory: 1998-2001. Duties- laboratory software hardware needs assessment and operational budget preparation, laboratory assistant supervision, systems administration, funding recruitment. Obtained \$20,000 software donation from ESRI
Member, Budget Committee: 1998-2003
Member, Research Committee: 2002-2003
Member, Curriculum Committee: 1998-1999
Member, Distinguished Speaker Committee:
Member, Facilities, Equipment and Technology Committee.
Co-chair, Lectures Committee: 2003-1998
Member, 4 Faculty Search Committee: 1999, 2000, 2001
Departmental library liaison: 2002-2003
Minor in Urban Studies Committee: 1998-1999
ESRI internship placement: 1999, 20002

Professional Memberships

American Association of Geographers (AAG)
Member of specialty groups: GIS, urban geography, cultural and political ecology, economic geography, digital geography

American Association of University Professors (AAUP)