# **Geoff Boeing**

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# EDUCATION

- Ph.D. City and Regional Planning, University of California, Berkeley, 2017
- M.S. Information Management, Arizona State University, 2006
- B.S. Computer Information Systems *summa cum laude*, Arizona State University, 2004

# **APPOINTMENTS**

2019–	University of Southern California Assistant Professor, Department of Urban Planning and Spatial Analysis, 2019– Faculty Affiliate, Spatial Sciences Institute, 2021–
2021–	Brookings Institution Nonresident Senior Fellow, Metropolitan Policy Program
2018–19	Northeastern University Assistant Professor, School of Public Policy and Urban Affairs Faculty Affiliate, Network Science Institute Faculty Affiliate, Global Resilience Institute
2017–18	University of California, Berkeley Postdoctoral Researcher, Department of City and Regional Planning

# **RESEARCH AREAS**

Urban informatics and geospatial data science: computational statistics, visualization, and spatial analysis

Transportation planning: street network design, access, equity, and urban form

Housing: emerging technology platforms' impacts on markets, residential mobility, and segregation

## PUBLICATIONS

#### **Journal Articles**

G. Boeing and J. Ha. "Resilient by Design: Simulating Street Network Disruptions across Every Urban Area in the World." *Transportation Research Part A: Policy and Practice*, 182, 104016. doi:10.1016/j.tra.2024.104016
G. Boeing, C. Pilgram, and Y. Lu. "Urban Street Network Design and Transport-Related Greenhouse Gas Emissions around the World." *Transportation Research Part D: Transport and Environment*, 127, 103961. doi:10.1016/j.trd.2023.103961
G. Boeing, Y. Lu, and C. Pilgram. "Local Inequities in the Relative Production of and Exposure to Vehicular Air Pollution in Los Angeles." *Urban Studies*, 60 (12), 2351–2368. doi:10.1177/00420980221145403

- G. Boeing, J. Wegmann, and J. Jiao. "Rental Housing Spot Markets: How Online Information Exchanges Can Supplement Transacted-Rents Data." *Journal of Planning Education and Research*, 43 (3), 525–537. doi:10.1177/0739456X20904435
- 2023 M. Seyedrezaei, B. Becerik-Gerber, M. Awada, S. Contreras, and G. Boeing. "Equity in the Built Environment: A Systematic Review." *Building and Environment*, 245, 110827. doi:10.1016/j.buildenv.2023.110827
- G. Boeing. "Street Network Models and Indicators for Every Urban Area in the World." *Geographical Analysis*, 54 (3), 519–535. doi:10.1111/gean.12281
- G. Boeing and W. Riggs. "Converting One-Way Streets to Two-Way Streets to Improve Transportation Network Efficiency and Reduce Vehicle Distance Traveled." *Journal of Planning Education and Research*, published online ahead of print. doi:10.1177/0739456X221106334
- G. Boeing, C. Higgs, S. Liu, B. Giles-Corti, J. F. Sallis, E. Cerin, M. Lowe, D. Adlakha, E. Hinckson,
  A. V. Moudon, D. Salvo, M. A. Adams, L. V. Barrozo, T. Bozovic, X. Delclòs-Alió, J. Dygrýn, S.
  Ferguson, K. Gebel, T. P. Ho, P. Lai, J. C. Martori, K. Nitvimol, A. Queralt, J. D. Roberts, G. H. Sambo,
  J. Schipperijn, D. Vale, N. Van de Weghe, G. Vich, and J. Arundel. "Using Open Data and Open-Source
  Software to Develop Spatial Indicators of Urban Design and Transport Features for Achieving Healthy
  and Sustainable Cities." *The Lancet Global Health*, 10 (6), 907–918. doi:10.1016/S2214-109X(22)00072-9
- B. Giles-Corti, A. V. Moudon, M. Lowe, D. Adlakha, E. Cerin, G. Boeing, C. Higgs, J. Arundel, S. Liu,
  E. Hinckson, D. Salvo, M. A. Adams, H. Badland, A. A. Florindo, K. Gebel, R. F. Hunter, J. Mitáš,
  A. L. Oyeyemi, A. Puig-Ribera, A. Queralt, M. P. Santos, J. Schipperijn, M. Stevenson, D. Van Dyck, G.
  Vich, and J. F. Sallis. "Creating Healthy and Sustainable Cities: What Gets Measured Gets Done." *The Lancet Global Health* 10 (6), 782–785. doi:10.1016/S2214-109X(22)00070-5
- M. Lowe, D. Adlakha, J. F. Sallis, D. Salvo, E. Cerin, A. V. Moudon, C. Higgs, E. Hinckson, J. Arundel, G. Boeing, S. Liu, P. Mansour, K. Gebel, A. Puig-Ribera, P. B. Mishra, T. Bozovic, J. Carson, J. Dygrýn, A. A. Florindo, T. P. Ho, H. Hook, R. F. Hunter, P. Lai, J. Molina-García, K. Nitvimol, A. L. Oyeyemi, C. D. G. Ramos, E. Resendiz, J. Troelsen, F. Witlox, and B. Giles-Corti. "City Planning Policies to Support Health and Sustainability: An International Comparison of Policy Indicators for 25 Cities." *The Lancet Global Health*, 10 (6), 882–894. doi:10.1016/S2214-109X(22)00069-9
- E. Cerin, J. F. Sallis, D. Salvo, E. Hinckson, T. L. Conway, N. Owen, D. Van Dyck, M. Lowe, C. Higgs, A. V. Moudon, M. A. Adams, K. L. Cain, L. B. Christiansen, R. Davey, J. Dygrýn, L. D. Frank, R. Reis, O. L. Sarmiento, D. Adlakha, G. Boeing, S. Liu, and B. Giles-Corti. "Determining Thresholds for Spatial Urban Design and Transport Features that Support Walking to Create Healthy and Sustainable Cities: Findings from the IPEN Adult Study." *The Lancet Global Health*, 10 (6), 895–906. doi:10.1016/S2214-109X(22)00068-7
- B. Giles-Corti, A. V. Moudon, M. Lowe, E. Cerin, G. Boeing, H. Frumkin, D. Salvo, S. Foster, A. Kleeman, S. Bekessy, T. Hérick de Sa, M. Nieuwenhuijsen, C. Higgs, E. Hinckson, D. Adlakha, J. Arundel, S. Liu, A. L. Oyeyemi, K. Nitvimol, and J. F. Sallis. "What Next? Expanding Our View of City Planning and Global Health, and Implementing and Monitoring Evidence-Informed Policy." *The Lancet Global Health*, 10 (6), 919–926. doi:10.1016/S2214-109X(22)00066-3
- S. Liu, C. Higgs, J. Arundel, G. Boeing, N. Cerdera, D. Moctezuma, E. Cerin, D. Adlakha, M. Lowe, and B. Giles-Corti. "A Generalized Framework for Measuring Pedestrian Accessibility around the World Using Open Data." *Geographical Analysis*, 54 (3), 559–582. doi:10.1111/gean.12290
- C. Higgs, A. Alderton, J. Rozek, D. Adlakha, H. Badland, G. Boeing, A. Both, E. Cerin, M. Chandrabose, C. De Gruyter, A. De Livera, L. Gunn, E. Hinckson, S. Liu, S. Mavoa, J. F. Sallis, K. Simons, and B. Giles-Corti. "Policy-Relevant Spatial Indicators of Urban Liveability And Sustainability: Scaling From Local to Global." *Urban Policy and Research*, 40 (4), 321–334. doi:10.1080/0811146.2022.2076215
- 2022 M. Lowe, J. F. Sallis, D. Salvo, E. Cerin, G. Boeing, C. Higgs, S. Liu, E. Hinckson, D. Adlakha, J.

	Arundel, A. V. Moudon, E. Resendiz, and B. Giles-Corti. "A Pathway to Prioritizing and Delivering Healthy and Sustainable Cities." <i>Journal of City Climate Policy and Economy</i> , 1 (1), 111–123. doi:10.3138/jccpe-2022.1.1.0008
2021	G. Boeing. "Off the Grid… and Back Again? The Recent Evolution of American Street Network Planning and Design." <i>Journal of the American Planning Association</i> 87 (1), 123–137. doi:10.1080/01944363.2020.1819382
2021	G. Boeing, M. Besbris, A. Schachter, and J. Kuk. "Housing Search in the Age of Big Data: Smarter Cities or the Same Old Blind Spots?" <i>Housing Policy Debate</i> 31 (1), 112–126. doi:10.1080/10511482.2019.1684336
2021	G. Boeing. "Spatial Information and the Legibility of Urban Form: Big Data in Urban Morphology." <i>International Journal of Information Management</i> 56, 102013. doi:10.1016/j.ijinfomgt.2019.09.009
2021	G. Boeing, M. Besbris, D. Wachsmuth, and J. Wegmann. "Tilted Platforms: Rental Housing Technology and the Rise of Urban Big Data Oligopolies." <i>Urban Transformations</i> 3, 6. doi:10.1186/s42854-021-00024-2
2020	G. Boeing. "Online Rental Housing Market Representation and the Digital Reproduction of Urban Inequality." <i>Environment and Planning A: Economy and Space</i> 52 (2), 449–468. doi:10.1177/0308518X19869678
2020	G. Boeing. "Planarity and Street Network Representation in Urban Form Analysis." <i>Environment and Planning B: Urban Analytics and City Science</i> 47 (5), 855–869. doi:10.1177/2399808318802941
2020	G. Boeing. "The Right Tools for the Job: The Case for Spatial Science Tool-Building." <i>Transactions in GIS</i> 24 (5), 1299–1314. doi:10.1111/tgis.12678
2020	G. Boeing. "A Multi-Scale Analysis of 27,000 Urban Street Networks: Every US City, Town, Urbanized Area, and Zillow Neighborhood." <i>Environment and Planning B: Urban Analytics and City Science</i> 47 (4), 590–608. doi:10.1177/2399808318784595
2020	G. Boeing. "Urban Street Network Analysis in a Computational Notebook." <i>Region: Journal of the European Regional Science Association</i> 6 (3), 39–51. doi:10.18335/region.v6i3.278
2019	W. Kang, T. Oshan, L. J. Wolf, G. Boeing, V. Frias-Martinez, S. Gao, A. Poorthuis, and W. Xu. "A Roundtable Discussion: Defining Urban Data Science." <i>Environment and Planning B: Urban</i> <i>Analytics and City Science</i> 46 (9), 1756–1768. doi:10.1177/2399808319882826
2019	G. Boeing. "Urban Spatial Order: Street Network Orientation, Configuration, and Entropy." <i>Applied Network Science</i> 4 (1), 67. doi:10.1007/s41109-019-0189-1
2019	G. Boeing. "Street Network Models and Measures for Every US City, County, Urbanized Area, Census Tract, and Zillow-Defined Neighborhood." <i>Urban Science</i> 3 (1), 28. doi:10.3390/urbansci3010028
2019	M. Padgham, G. Boeing, D. Cooley, N. Tierney, M. Sumner, T. Phan, and R. Beare. "An Introduction to Software Tools, Data, and Services for Geospatial Analysis of Stroke Services." <i>Frontiers in Neurology</i> 10, 743. doi:10.3389/fneur.2019.00743
2018	G. Boeing. "Measuring the Complexity of Urban Form and Design." <i>Urban Design International</i> 23 (4), 281–292. doi:10.1057/s41289-018-0072-1
2018	G. Boeing. "Estimating Local Daytime Population Density from Census and Payroll Data." <i>Regional Studies, Regional Science</i> 5 (1), 179–182. doi:10.1080/21681376.2018.1455535
2018	G. Boeing. "The Effects of Inequality, Density, and Heterogeneous Residential Preferences on Urban Displacement and Metropolitan Structure: An Agent-Based Model." <i>Urban Science</i> 2 (3), 76. doi:10.3390/urbansci2030076
2018	G. Boeing. "Pynamical: Model and Visualize Discrete Nonlinear Dynamical Systems, Chaos, and Fractals." <i>Journal of Open Source Education</i> 1 (1), 15. doi:10.21105/jose.00015

2017	G. Boeing. "OSMnx: New Methods for Acquiring, Constructing, Analyzing, and Visualizing Complex Street Networks." <i>Computers, Environment and Urban Systems</i> 65, 126–139. doi:10.1016/j.compenvurbsys.2017.05.004
2017	G. Boeing and P. Waddell. "New Insights into Rental Housing Markets across the United States: Web Scraping and Analyzing Craigslist Rental Listings." <i>Journal of Planning Education and Research</i> 37 (4), 457–476. doi:10.1177/0739456X16664789
2017	G. Boeing. "OSMnx: A Python Package to Work with Graph-Theoretic OpenStreetMap Street Networks." <i>Journal of Open Source Software</i> 2 (12), 1. doi:10.21105/joss.00215
2016	G. Boeing. "Honolulu Rail Transit: International Lessons from Barcelona in Linking Urban Form, Design, and Transportation." <i>Planext</i> 2, 28–47. doi:10.17418/planext.2016.3vol.02
2016	G. Boeing. "Visual Analysis of Nonlinear Dynamical Systems: Chaos, Fractals, Self-Similarity, and the Limits of Prediction." <i>Systems</i> 4 (4), 37. doi:10.3390/systems4040037
2014	G. Boeing, D. Church, H. Hubbard, J. Mickens, and L. Rudis. "LEED-ND and Livability Revisited."

Berkeley Planning Journal 27 (1), 31-55. doi:10.5070/BP327124500

#### **Book Chapters**

2022	G. Boeing, M. Batty, S. Jiang, and L. Schweitzer. "Urban Analytics: History, Trajectory, and Critique." In: <i>Handbook of Spatial Analysis in the Social Sciences</i> (pp. 503–516), edited by S. Rey and R. Franklin. Cheltenham, England: Edward Elgar. doi:10.4337/9781789903942.00039
2021	G. Boeing and D. Arribas-Bel. "GIS and Computational Notebooks." In: <i>The Geographic Information Science &amp; Technology Body of Knowledge</i> , edited by J. P. Wilson. Ithaca, NY: University Consortium for Geographic Information Science. doi:10.22224/gistbok/2021.1.2
2021	G. Boeing. "Exploring Urban Form Through OpenStreetMap Data: A Visual Introduction." In: <i>Urban Experience and Design: Contemporary Perspectives on Improving the Public Realm</i> (pp. 167–184), edited by J. B. Hollander and A. Sussman. New York, NY: Routledge. doi:10.4324/9780367435585-15
2019	G. Boeing. "The Morphology and Circuity of Walkable and Drivable Street Networks." In: <i>The Mathematics of Urban Morphology</i> (pp. 271–287), edited by L. D'Acci. Basel, Switzerland: Birkhäuser. doi:10.1007/978-3-030-12381-9_12
2017	J. M. Barajas, G. Boeing, and J. Wartell. "Neighborhood Change, One Pint at a Time: The Impact of Local Characteristics on Craft Breweries." In: <i>Untapped: Exploring the Cultural Dimensions of Craft</i> <i>Beer</i> (pp. 155–176), edited by N. G. Chapman, J. S. Lellock, and C. D. Lippard. Morgantown, WV: West Virginia University Press. doi:10.31235/osf.io/v88hh

#### **Conference Proceedings**

- G. Boeing, J. G. Harten, and R. Sanchez-Moyano. "Digitalization of the Housing Search: Homeseekers, Gatekeepers, and Market Legibility." *Bringing Digitalization Home: How Can Technological Changes Address Housing-Related Challenges?* Cambridge, MA: Harvard University Joint Center for Housing Studies. https://bit.ly/3IIQ61d
- C. Higgs, A. Alderton, J. Rozek, D. Adlakha, H. Badland, G. Boeing, A. Both, E. Cerin, M. Chandrabose, C. De Gruyter, L. Gunn, A. De Livera, E. Hinckson, S. Liu, S. Mavoa, J. Sallis, K. Simons, and B. Giles-Corti. "Calculation of Policy-Relevant Spatial Indicators of Urban Liveability: Experiences of Scaling a Research Programme from Local to Global." *10<sup>th</sup> State of Australasian Cities Conference*. Melbourne, Australia: APO. doi:10.25916/jbnk-hp52
- 2019 G. Boeing. "Street Network Patterns, Orientation, and Entropy around the World." *Compendium of the Transportation Research Board 98<sup>th</sup> Annual Meeting*. Washington, DC: Transportation Research Board. https://trid.trb.org/view/1573315

- A. Abdelkader, G. Boeing, B. T. Fasy, and D. L. Millman. Topological Distance between Nonplanar
   Transportation Networks. *Proceedings of the 28<sup>th</sup> Fall Workshop on Computational Geometry*. New York, NY: City University of New York. https://bit.ly/3lHhqAD
- 2018 G. Boeing. "The Relative Circuity of Walkable and Drivable Urban Street Networks." *Compendium of the Transportation Research Board* 97<sup>th</sup> Annual Meeting. Washington, DC: Transportation Research Board. https://trid.trb.org/view/1495502

#### **Edited Articles and Reviews**

2023	G. Boeing and W. Riggs. "Rethinking the One-Way Street." <i>Transfers Magazine</i> 11 (Fall), 18–22. https://bit.ly/3sjeP7J
2018	G. Boeing. "Automated Street Network Analysis for Urban Planners with OSMnx." <i>Planning and Technology Today</i> 117 (Spring), 10–11. doi:10.31235/osf.io/mkbp3
2017	G. Boeing. "A Review of the Structure and Dynamics of Cities: Urban Data Analysis and Theoretical Modeling." <i>Journal of the American Planning Association</i> 83 (4), 418. doi:10.1080/01944363.2017.1362306
2017	G. Boeing. "Understanding Cities through Networks and Flows." <i>Berkeley Planning Journal</i> 28 (1), 118–123. doi:10.5070/BP328133862

2016 G. Boeing. "How Our Neighborhoods Lost Food, and How They Can Get It Back." *Progressive Planning* 206 (Winter), 35–37. doi:10.31235/osf.io/a5e2q

#### **Reports and Other Publications**

2023	R. Sanchez-Moyano, G. Boeing, and J. G. Harten. "The Promises and Pitfalls of Housing Search
	Digitalization." Federal Reserve Bank of San Francisco. Jun 28. https://bit.ly/43dlGwo

- 2023 G. Boeing, J. Ha, Y. Zhou. "Improving the Accuracy of Intersection Counts and Densities for Measuring Urban Street Network Compactness and Resilience." Caltrans, Pacific Southwest Region UTC. Technical report. https://rosap.ntl.bts.gov/view/dot/67537
- 2022 G. Boeing. "Around the World, Cities Are Falling Short on Health and Sustainability Goals." Brookings Institution. Nov 16. https://brook.gs/3ULDj2K
- 2021 G. Boeing, Y. Lu, C. Pilgram, and P. Mannino. "Race, Class, and the Production of and Exposure to Vehicular Pollution in Los Angeles." US Department of Transportation, Pacific Southwest Region UTC. Technical report. https://rosap.ntl.bts.gov/view/dot/67432
- 2020 G. Boeing. "How Much Does It Cost to Rent an Apartment, Anyway?" Planetizen. Mar 10. https://bit.ly/37SU4lf
- P. Waddell, G. Boeing, M. Gardner, and E. Porter. "An Integrated Pipeline Architecture for Modeling Urban Land Use, Travel Demand, and Traffic Assignment." US Department of Energy SMART Mobility Urban Science Pillar: Coupling Land Use Models and Network Flow Models. Technical report. doi:10.31235/osf.io/74zaw
- 2017 G. Boeing. "Making Street Network Analysis Easy for Planners with OpenStreetMap." Association of Collegiate Schools of Planning. Apr 11. https://bit.ly/3n5ac9K

#### Patents

A. E. Beck, G. Boeing, and D. Shannon. *Systems and Methods for Analyzing Requirements*. United States patent US8650186B2, European patent EP2413256, Australian patent AU2011204935, Canadian patent CA2747481, Chinese patent CN102346763.

# INVITED TALKS

2024	"Searching for Housing Online: The Challenges and Opportunities of Digitalization." University of Texas at Austin, Good Systems Smart Cities Consortium. Austin, Texas. Apr 1.
2024	"Generalizability in Urban Science." Cornell University, Department of City and Regional Planning. Ithaca, New York. Mar 29.
2023	"Urban Informatics for Transport: Measuring Networks and Access around the World." University Consortium for Geographic Information Science. Washington, DC. Feb 17.
2023	"Measuring Built Environments around the World: New Insights into Urban Sustainability and Health." The Ohio State University, Center for Urban and Regional Analysis. Tech in the City Speaker Series. Columbus, Ohio. Feb 10.
2022	"Digitalization of the Housing Search: Homeseekers, Gatekeepers, and Market Legibility." University of Washington, Interdisciplinary Ph.D. Program in Urban Design and Planning and Ph.D. Program in the Built Environment. Seattle, Washington. May 20.
2022	"Street Network Models and Indicators for Every Urban Area in the World." National University of Singapore, Department of Real Estate seminar series. Singapore. Mar 14.
2021	"Urban Morphology and Street Network Science." University of Cincinnati, Department of Geography. Cincinnati, Ohio. Oct 15.
2021	"Street Network Science and New Urban Data." Cornell University, Tech Campus. Urban Data guest lecture. New York, New York. Oct 13.
2021	"Street Networks and the Evolving Urban Structure." CEMFI Empirical Microeconomics seminar series. Madrid, Spain. Apr 8.
2021	"Street Network Models and Indicators for Every Urban Area in the World." University of Bristol and Newcastle University Centre for Data. Spatial Analytics and Data seminar series. Newcastle upon Tyne, England. Jan 26.
2020	"Street Networks and the Evolving Urban Structure." University of Chicago, Center for Spatial Data Science and Mansueto Institute for Urban Innovation. Chicago, Illinois. Nov 18.
2020	"Street Network Models and Indicators for Every Urban Area in the World." Asian Institute of Management. The Science of Data seminar series. Makati, Philippines. Oct 26.
2020	"OSMnx for Urban Street Network Analysis." University of California, Los Angeles, Department of Urban Planning. Introduction to GIS and Spatial Data Science, guest lecture. Los Angeles, California. Oct 26.
2020	"Introduction to Street Network Analysis with OSMnx." Alan Turing Institute and University of Warwick. Data Science for Social Good lecture series. London, England. Aug 21.
2020	"Volunteered Geographic Information in Urban Analytics." University of California, Berkeley, Department of City and Regional Planning. Introduction to Urban Data Analytics, guest lecture. Berkeley, California. Jun 17.
2019	"Urban Data Science: Street Networks and Travel Behavior." Evidation Health. Data Science Seminar Series. Santa Barbara, California. May 16.
2019	"Network Science for Urban Transportation Modeling and Long-Range Planning." MIT Megacity Logistics Lab at the Center for Transportation and Logistics. Cambridge, Massachusetts. May 9.
2019	"Computational Modeling and Analysis in Transportation System Design." Cornell University. Systems Engineering Seminar Series. Ithaca, New York. Apr 12.
2019	"Growth, Access, and Resilience as Urban Technology Paradigms Shift." The World Bank, Global Facility for Disaster Reduction and Recovery. Washington, DC. Apr 3.

2018	"Computational Urban Street Network Analysis." Virginia Tech. Urban Computing Seminar Series. Arlington, Virginia. Dec 4.
2018	"Urban Science and Street Networks." Massachusetts Institute of Technology, Department of Urban Studies and Planning. Cambridge, Massachusetts. Nov 27.
2018	"Introduction to Street Network Analysis with OSMnx." University of Helsinki, Digital Geography Lab. Helsinki, Finland. Nov 16.
2018	"Urban Street Network Science with OSMnx." Tufts University, Department of Urban and Environmental Policy and Planning. Somerville, Massachusetts. Nov 15.
2018	"Free Data for Free Spaces: Democratizing and Disseminating Spatial Network Data and Models for Better Urban Planning." Venice Biennale of Architecture. Venice, Italy. Oct 24.
2018	"Online Rental Housing Market Representation and the Digital Reproduction of Urban Inequality." Harvard University, Joint Center for Housing Studies. Cambridge, Massachusetts. Sep 20.
2018	"Urban Street Network Science: Modeling, Simulating, and Visualizing Complex Transportation Systems." Uber Technologies. San Francisco, California. Aug 20.
2018	"The Study of Street Networks in Urban Data Science." NYU Center for Data Science. New York, New York. Apr 18.
2018	"Computational Street Network Analysis in Urban Form Studies." Columbia University Graduate School of Architecture, Planning, and Preservation. New York, New York. Apr 17.
2018	"Scalable Methods for Acquiring, Analyzing, and Visualizing Urban Street Networks." NYU Center for Urban Science and Progress, Applied Urban Science Group. Brooklyn, New York. Apr 16.
2018	"Studying Urban Form and Resilience through Large-Scale Street Network Analysis." University of California, Santa Barbara, Department of Geography. Santa Barbara, California. Jan 30.
2018	"Seeing Cities through New Technologies and Big Data." University of Oregon, School of Planning, Public Policy, and Management. Eugene, Oregon. Jan 25.
2018	"Urban Form, Sustainability, and Large-Scale Street Network Analysis." Northeastern University, School of Public Policy and Urban Affairs. Boston, Massachusetts. Jan 18.
2018	"Understanding Urban Form and Circulation through Large-Scale Street Network Analysis." Dartmouth College, Department of Geography. Hanover, New Hampshire. Jan 15.
2017	"Street Network Analyses of Urban Form Resilience and Equity." University of Chicago, Mansueto Institute for Urban Innovation. Chicago, Illinois. Nov 2.
2017	"Measuring Urban Form Sustainability with Topological and Geometric Street Network Analysis." Stanford University, Sustainable Urban Systems Initiative. Palo Alto, California. Oct 26.
2017	"Graph-Theoretic Representation and Analysis of Urban Street Networks." Montana State University, Department of Computer Science. Bozeman, Montana. Oct 16.
2017	"OpenStreetMap Network Data for Transportation Planning." Remix Transit Planning. San Francisco, California. Aug 16.
2017	"Street Networks: Urban Form and Resilience." University of Florida, Department of Urban and Regional Planning. Gainesville, Florida. May 8.
2017	"Scalable Methods for Acquiring, Analyzing, and Visualizing Urban Street Networks." The Santa Fe Institute. Santa Fe, New Mexico. Feb 2.
2016	"Urban Data Science for Studying Housing Affordability and Urban Form." NYU Center for Urban Science and Progress. Brooklyn, New York. Dec 14.
2016	"New Insights into Rental Housing Markets: Web Scraping and Analyzing Craigslist Rental Listings."

City of Oakland. Oakland, California. May 12.

- 2016 "New Insights into Rental Housing Markets: Web Scraping and Analyzing Craigslist Rental Listings." City of San Francisco, Citywide Planning Division. San Francisco, California. Apr 19.
- 2016 "Smart Cities, Technology, and Representation: Prospects and Challenges." Adobe Systems. Sustainability Speaker Series. San Jose, California. Jan 28.

#### **Invited Symposium Talks**

- <sup>2023</sup> "Spatial Analytics to Benchmark and Monitor Healthy and Sustainable Cities." Exploring the Research Opportunities from the Intersection of Advancing Planetary Health and Cardiovascular Disease: Improving Human Health. Hosted by the U.S. National Institutes of Health. Dec 14–15.
- <sup>2023</sup> "The 1,000 Cities Challenge." Cities, Form, Environmental Exposures, and Health Impacts. Hosted by the Barcelona Institute for Global Health. Sitges, Spain. Oct 24–25.
- <sup>2023</sup> "The Evolving Housing Search: Digitalization and Market Legibility." Southern California Association of Governments Annual Demographic Workshop. Los Angeles, California. Sep 20.
- <sup>2022</sup> "Using Open Data and Open-Source Software to Develop Spatial Indicators of Urban Design and Transport Features for Achieving Healthy and Sustainable Cities." Global Launch of the Lancet Global Health Series on Urban Design, Transport, and Health. Hosted by *The Lancet Global Health*. May 10–12.
- <sup>2022</sup> "Digitalization of the Housing Search: Homeseekers, Gatekeepers, and Market Legibility." Bringing Digitalization Home: How Can Technological Changes Address Housing-Related Challenges? Hosted by the Harvard University Joint Center for Housing Studies and Graduate School of Design. Cambridge, Massachusetts. Mar 24–26.
- 2021 "Housing Search in the Age of Big Data: Smarter Cities or the Same Old Blind Spots?" The Intersection of Smart Cities with Housing and Community Development. Hosted by *Housing Policy Debate* and Virginia Tech. Feb 15.
- 2019 Spatial Data Science Symposium: Setting the Spatial Data Science Agenda. Hosted by the University of California, Santa Barbara. Santa Barbara, California. Dec 9–11.

#### **Campus Talks**

2023	"Resilient by Design: Simulating Street Network Disruptions across Every Urban Area in the World." METRANS University Transportation Center Speaker Series. Los Angeles, California. Nov 2.
2022	"Local Inequities in the Relative Production of and Exposure to Vehicular Air Pollution in Los Angeles." METRANS University Transportation Center Speaker Series. Los Angeles, California. Mar 30.
2020	"Street Network Models and Indicators for Every Urban Area in the World." METRANS University Transportation Center Speaker Series. Los Angeles, California. Oct 27.
2018	"Urban Street Network Science with OSMnx." Northeastern University Seattle Campus. Seattle, Washington. Nov 28.
2018	"The Legibility of Urban Spatial Order in Computational Street Network Analysis." NUVis: Northeastern University Visualization Consortium. Boston, Massachusetts. Oct 18.
2017	"Urban Street Network Analysis with OSMnx." Geospatial Innovation Facility, College of Natural Resources, University of California, Berkeley. Berkeley, California. Oct 5.

#### **CONFERENCE ACTIVITY**

#### **Keynote and Plenary Addresses**

- <sup>2024</sup> "The Design of American Streets." Keynote address. Induction ceremony of the Nu Theta chapter of Gamma Theta Upsilon, the international geographical honor society. Los Angeles, California. Apr 23.
- <sup>2021</sup> "Urban Mobility and Street Network Science." Annual Regional Studies/Regional Science keynote lecture. Regional Studies Association Winter Conference. Nov 8.
- <sup>2019</sup> "Geographic Information, Spatial Networks, and the New Urban Science." 8<sup>th</sup> annual *Transactions in GIS* plenary address. American Association of Geographers Annual Meeting. Washington, DC. Apr 3–7.
- <sup>2018</sup> "The Legible and the Illegible: Urban Science, City Design, and Human Circulation." Plenary address. The Architect of the Future Conference. Moscow, Russia. Sep 10–11.

#### **Sessions Organized**

2017 "Emerging Computational Methods in Urban Design." Association of Collegiate Schools of Planning Annual Conference. Denver, Colorado. Oct 12–15.

#### **Sessions Chaired/Moderated**

- <sup>2021</sup> "Big Data and Machine Learning for Urban Mobility." Association of Collegiate Schools of Planning Annual Conference. Miami, Florida. Oct 21–23.
- 2019 "Machine Learning Methods." Association of Collegiate Schools of Planning Annual Conference. Greenville, South Carolina. Oct 24–27.
- <sup>2019</sup> "Social Systems." International Conference on Network Science. Burlington, Vermont. May 27–31.
- 2018 "Smart Cities Technologies for Transportation Systems." Smart Cities: Critical Infrastructure Symposium. Seattle, Washington. Nov 29.

#### **Invited Panelist**

2022	"Teaching Data Science in Urban Planning." Panelist with Marta González, Sarah Williams, and Anthony Vanky; chaired by Adam Millard-Ball. Association of Collegiate Schools of Planning Annual Conference. Toronto, Canada. Nov 3–6.
2022	"City Intelligence with Open Data." Panelist with Stephanie Dietrick, Cy Chan, and Sobhan Moosavi; chaired by Hua Wei. ACM International Conference on Web Search and Data Mining. Phoenix, Arizona. Feb 21–25.
2021	"Machine Learning in Public Health." Panelist with Catherine D'Ignazio, Jing Gao, and Alykhan Mohamed; chaired by Rumi Chunara. Conference on Neural Information Processing Systems. Dec 6–14.
2021	"Plenary Session: AI and Big Data in Real Estate and Urban Studies." Panelist with Stephanie Sy, Thies Lindenthal, Man Cho, and Warren Wan; chaired by Tien Foo Sing. Joint Real Estate Conference of the American Real Estate and Urban Economics Association, Asian Real Estate Society, and Global Chinese Real Estate Congress. Singapore. Jul 18–21.
2020	"Nationwide Studies of Urban Form: Evolution, Innovation, and New Opportunities." Panelist with Reid Ewing, Shima Hamidi, and Catherine Brinkley; chaired by Steven Richter. Association of Collegiate Schools of Planning Annual Conference. Nov 5–8.
2020	"Urban Data Science Beyond the Hype: Understanding the Challenges and Opportunities of Incorporating Data Science into Urban Planning Pedagogy and Practice." Panelist with Karen Chapple and Atul Pokharel; chaired by Abigail Cochran and Manuel Santana. Association of Collegiate Schools of Planning Annual Conference. Nov 5–8.

- 2019 "Urban Data Science: Methods and Models for Our Changing Cities." Panelist with Vanessa Frias-Martinez, Wenfei Xu, Song Gao, and Ate Poorthuis; chaired by Levi Wolf and Wei Kang. American Association of Geographers Annual Meeting. Washington, DC. Apr 3–7.
  2018 "Big Ideas Session on Civic Analytics and Urban Science." Panelist with Luis Bettencourt, Marta González, and Sarah Williams; chaired by Constantine Kontokosta. Association of Collegiate Schools of Planning Annual Conference. Buffalo, New York. Oct 25–28.
  2018 "Who Benefits from 'Smart City' Technologies? How Can They Be a Piece of the Puzzle Toward Social and Environmental Justice?" Panelist with Lisa Schweitzer, Clint Andrews, and Tom Sanchez; chaired by Mehdi Heris. Association of Collegiate Schools of Planning Annual Conference. Buffalo, New York. Oct 25–28.
  2017 "Public Communication Strategies for Planning Academics." Panelist with Jennifer Dill, Yingling Fan,
- <sup>2017</sup> "Public Communication Strategies for Planning Academics." Panelist with Jennifer Dill, Yingling Fan, and Justin Hollander; chaired by Carissa Slotterback. Association of Collegiate Schools of Planning Annual Conference. Denver, Colorado. Oct 12–15.

### **Conference Papers Presented**<sup>1</sup>

- J. G. Harten and G. Boeing. "Single Women Wanted: The Role of Gender in Accessing Shared Housing." International Conference on Urban Affairs. New York, New York. Apr 24–27.
- 2024 G. Boeing and J. Ha. "Resilient by Design: Simulating Street Network Disruptions across Every Urban Area in the World." American Association of Geographers Annual Meeting. Honolulu, Hawaii. Apr 16–20.
- 2024 M. Awad, S. Bacq, G. Boeing, D. Dentoni, and S. Osbourne. "Collective Organizing for Urban Problems: An Integrative Review and Interdisciplinary Roadmap from Entrepreneurship, Public Management, and Urban Planning." Journal of Management Studies Conference. Edinburgh, Scotland. Mar 5–6.
- 2023 M. Lore, J. G. Harten, and G. Boeing. "Computer-Assisted Methods for Thematic Coding of Large-Scale Text Data in Urban Planning." Association of Collegiate Schools of Planning Annual Conference. Chicago, Illinois. Oct 19–21.
- 2023 G. Boeing and *Y. Zhou*. "Improving the Accuracy of Intersection Counts and Density Measures of Urban Street Networks." Association of Collegiate Schools of Planning Annual Conference. Chicago, Illinois. Oct 19–21.
- 2023 G. Boeing and *J. Ha.* "Simulating Street Network Resilience and Robustness around the World." Association of Collegiate Schools of Planning Annual Conference. Chicago, Illinois. Oct 19–21.
- G. Boeing, *C. Pilgram*, and Y. Lu. "Street Network Design and Transport-Related Greenhouse Gas Emissions around the World." Transportation Research Board Annual Meeting. Washington, DC. Jan 8–12.
- 2022 J. G. Harten and G. Boeing. "Negotiating Vulnerability: The Role of Gender in Shared Housing." Association of Collegiate Schools of Planning Annual Conference. Toronto, Canada. Nov 3–6.
- G. Boeing, C. Higgs, S. Liu, B. Giles-Corti, J. F. Sallis, E. Cerin, M. Lowe, D. Adlakha, E. Hinckson, A. V. Moudon, D. Salvo, M. A. Adams, L. V. Barrozo, T. Bozovic, X. Delclòs-Alió, J. Dygrýn, S. Ferguson, K. Gebel, T. P. Ho, P. Lai, J. C. Martori, K. Nitvimol, A. Queralt, J. D. Roberts, G. H. Sambo, J. Schipperijn, D. Vale, N. Van de Weghe, G. Vich, and J. Arundel. "Using Open Data and Open-Source Software to Develop Spatial Indicators of Urban Design and Transport Features for Achieving Healthy and Sustainable Cities." International Society for Physical Activity and Health Congress. Abu Dhabi, United Arab Emirates. Oct 23–26.
- 2022 G. Boeing. "Measuring Healthy, Sustainable Cities: Global Urban Indicators from Open Data." World Planning Schools Congress. Nusa Dua, Indonesia. Aug 29–Sep 2.

<sup>&</sup>lt;sup>1</sup>Presenting author *italicized* if other than first author.

G. Boeing, Y. Lu, C. Pilgram, and P. Mannino. "Race, Class, and the Production of and Exposure to 2022 Vehicular Pollution in Los Angeles." Association for Public Policy Analysis & Management Fall Conference. Austin, Texas. Mar 27–29. G. Boeing, Y. Lu, C. Pilgram, and P. Mannino. "Local Inequities in the Relative Production of and 2022 Exposure to Vehicular Air Pollution in Los Angeles." American Association of Geographers Annual Meeting. New York, NY. Feb 25–Mar 1. G. Boeing, Y. Lu, C. Pilgram, and P. Mannino. "Local Inequities in the Relative Production of and 2022 Exposure to Vehicular Air Pollution in Los Angeles." Transportation Research Board Annual Meeting. Washington, DC. Jan 9–13. S. Jamal, E. Desjardins, G. Boeing, R. Lovelace, and A. Paez. "Using R to Develop Open Source Course 2.02.1 Packages with Computational Notebooks: An Example of Transportation Geography." Innovations in Education Conference. Hamilton, Canada. Dec 9–10. C. Higgs, J. Rozek, A. Alderton, B. Giles-Corti, H. Badland, C. De Gruyter, D. Adlakha, K. Simons, A. 2021 Both, G. Boeing, E. Cerin, A. De Livera, S. Liu, M. Chandrabose, J. F. Sallis, L. Gunn, and E. Hinckson. "Calculation of Policy-Relevant Spatial Indicators of Urban Liveability: Experiences of Scaling a Research Programme from Local to Global." State of Australasian Cities Conference. Melbourne, Australia. Dec 1–3. G. Boeing, Y. Lu, C. Pilgram, and P. Mannino. "Race, Class, and the Production of and Exposure to 2021 Vehicular Pollution in Los Angeles." Association of Collegiate Schools of Planning Annual Conference. Miami, Florida. Oct 21–23. S. Liu, C. Higgs, J. Arundel, G. Boeing, N. Cerdera, and D. Moctezuma. "A Generalized Framework for 2021 Measuring Pedestrian Accessibility around the World Using Open Data." Association of Collegiate Schools of Planning Annual Conference. Miami, Florida. Oct 21–23. G. Boeing. "Street Network Models and Indicators for Every Urban Area in the World." Transportation 2021 Research Board Annual Meeting. Jan 25–29. G. Boeing. "Street Network Models, Indicators, and Relationships with Vehicular Emissions for Every 2020 Metropolitan Area in the World." Association of Collegiate Schools of Planning Annual Conference. Nov 5-8. G. Boeing. "The Street Grid and Car Ownership: Trends in US Transportation Network Design." 2020 Transportation Research Board Annual Meeting. Washington, DC. Jan 12–16. G. Boeing. "Off the Grid: The Evolution of American Street Network Planning and Design." 2019 Association of Collegiate Schools of Planning Annual Conference. Greenville, South Carolina. Oct 24-27. G. Boeing and W. Riggs "Converting One-Way Streets to Two-Way Streets to Improve Transportation 2019 Network Efficiency and Reduce Emissions." Association of Collegiate Schools of Planning Annual Conference. Greenville, South Carolina. Oct 24–27. G. Boeing. "Urban Spatial Order: Street Network Orientation, Configuration, and Entropy." 2019 International Conference on Network Science. Burlington, Vermont. May 27–31. G. Boeing. "The Legibility of Urban Form: Spatial Information Platforms and Visualization." 2019 International Conference on Urban Experience and Design. Medford, Massachusetts. Apr 26. G. Boeing. "Online Rental Housing Market Representation and the Digital Reproduction of Urban 2019 Inequality." Boston Area Research Initiative Annual Conference. Boston, Massachusetts. Apr 26. G. Boeing. "The Evolution of American Street Network Design and Planning." Urban Affairs 2019 Association Annual Conference. Los Angeles, California. Apr 24–27. A. Abdelkader, G. Boeing, B. T. Fasy, and D. L. Millman. "Local Persistent Homology-Based Distances 2019 between Nonplanar Road Networks." Joint Mathematics Meetings. Baltimore, Maryland. Jan 16–19.

2018	A. Abdelkader, G. Boeing, B. T. Fasy, and D. L. Millman. "Topological Distance Between Nonplanar Transportation Networks." Fall Workshop on Computational Geometry. Queens, New York. Oct 26–27.
2018	G. Boeing. "Sociodemographic Representation of Online Rental Housing Listings: Information Surpluses and Deficits." Association of Collegiate Schools of Planning Annual Conference. Buffalo, New York. Oct 25–28.
2018	P. Waddell, I. Garcia-Dorado, S. Maurer, G. Boeing, M. Gardner, E. Porter, and D. Aliaga. "Urban Modeling Without Zones: A Metropolitan Graph-Based Microsimulation of Real Estate Markets and Transportation." Association of Collegiate Schools of Planning Annual Conference. Buffalo, New York. Oct 25–28.
2018	G. Boeing. "Transportation Network Modeling and Urban Equity." Dukakis Center for Urban and Regional Policy Transportation Equity Conference. Boston, Massachusetts. Oct 19.
2018	P. Waddell, I. Garcia-Dorado, S. Maurer, G. Boeing, M. Gardner, E. Porter, and D. Aliaga. "Architecture for Modular Microsimulation of Real Estate Markets and Transportation." Symposium on Applied Urban Modelling. Cambridge, England. Jun 27–29.
2017	G. Boeing. "New Methods for Acquiring and Analyzing Worldwide Street Network Data: A Multiscale Analysis of 27,000 Urban Street Networks." Association of Collegiate Schools of Planning Annual Conference. Denver, Colorado. Oct 12–15.
2016	G. Boeing. "Craigslist and U.S. Rental Housing Markets." American Planning Association Annual Conference. Phoenix, Arizona. Apr 2–5.
2016	G. Boeing. "Understanding Informal Rental Housing Markets through Public Data." American Association of Geographers. San Francisco, California. Mar 29–Apr 2.
2016	J. M. Barajas, G. Boeing, and <i>J. Wartell.</i> "Neighborhood Change, One Pint at a Time: The Impact of Local Characteristics on Craft Breweries." Urban Affairs Association Annual Conference. San Diego, California. Mar 16–19.
2015	G. Boeing. "Methods for Measuring the Aggregate Complexity Outcomes of Urban Design." International Conference on Complex Systems. Tempe, Arizona. Sep 28–Oct 2.
2015	G. Boeing. "Pedagogy of Urban Informatics." Environmental Design Circus. Berkeley, California. Mar 6.
2014	G. Boeing and P. Waddell. "Web Scraping Urban Data: Lessons from the Lab and the Classroom." Association of Collegiate Schools of Planning Annual Conference. Philadelphia, Pennsylvania. Oct 30–Nov 2.
2014	G. Boeing, D. Church, H. Hubbard, J. Mickens, and L. Rudis. "LEED-ND and Perceptions of Livability." Environmental Design Circus. Berkeley, California. Mar 13.

# **GRANTS AND AWARDS**

# Awards and Honors

2024	USC Price High Impact Research Award
2023	National Planning Institute of Australia Award for Planning Research Excellence (joint)
2022	Planning Institute of Australia (Victoria) Award for Planning Excellence—Planning Research (joint)
2021	USC Price ASPD Golden Apple Award for teaching excellence
2020	Stough-Johansson Springer Award, best WRSA paper by an early-career scholar

2019 Network Science Society Visualization Prize finalist

- 2018 Information Is Beautiful Awards shortlist
- 2018 ACSP FWIG Emerging Scholar Award
- 2014 Kaye Bock Award, best journal article
- 2010 Accenture Inventor Innovation Award

#### **Competitive Grants and Fellowships**

- 2024–25 Measuring Street Network Disruptions' Impacts on Real-World Trips to Design More Resilient Infrastructure (\$100,000). US Department of Transportation/Pacific Southwest Region University Transportation Center research grant. PI.
- 2021–22 Improving the Accuracy of Intersection Counts and Densities for Measuring Urban Street Network Compactness and Resilience (\$100,000). Caltrans/Pacific Southwest Region University Transportation Center research grant. PI.
- 2020–22 Connections Between Built Environments, Policy, and Public Health (\$200,000). The Public Good Projects research grant. PI.
- 2020–21 Race, Class, and the Production of and Exposure to Vehicular Pollution in Los Angeles (\$100,000). US Department of Transportation/Pacific Southwest Region University Transportation Center research grant. PI.
- 2019 Urban Form Impact: Humans, Environment, Equity (\$50,000). NU Tier 1 research grant. Co-PI with Sara Carr and Jay Cephas.
- 2019 NU CSSH summer research matching grant (\$6,000). PI.
- 2019 NU Lab for Maps, Texts, and Networks research grant (\$2,500). PI.
- 2016–17 University of California Doctoral Completion Fellowship (\$36,655)
- 2012–16 University of California Regents' Fellowship (\$158,025)

#### **COURSES TAUGHT**

#### **University of Southern California**

Urban Informatics

Advanced Urban Analytics

Data, Evidence, and Communication for the Public Good

#### **Northeastern University**

Urban Theory and Science Advanced Spatial Analysis of Urban Systems Big Data for Cities

#### University of California, Berkeley

Urban Informatics and Visualization (graduate student instructor)

#### Planetizen

Python for Planners Data Analysis and Visualization for Planners Geospatial Data Analysis Street Network Analysis

#### SERVICE

#### **Board of Directors**

2024– The Public Good Projects, New York, New York

#### Academic Journal Editorship

- 2020- Urban Findings, editorial board
- 2021–24 Urban Studies, editorial board
- 2021 *PLOS One*, guest academic editor
- 2013–14 Berkeley Planning Journal, book review editor

#### Service to the Field

- 2022– Global Observatory of Healthy and Sustainable Cities, executive committee
- 2021–22 Association of Collegiate Schools of Planning, review and appraisal committee
- 2021–22 Spatial Data Science Symposium, program committee
- 2021 World Society for Transport and Land Use Research, emerging data and technologies track co-lead
- 2019–21 Association of Collegiate Schools of Planning, outreach and engagement task force
- 2019–20 Future Cities Challenge, program committee
- 2018–20 Association of Collegiate Schools of Planning, review and appraisal committee
- 2018–20 Symposium on Simulation for Architecture and Urban Design, scientific committee

#### Service to the University

- 2024- USC Price dean search committee
- 2024– USC Price research committee
- 2020– USC Price Ph.D. degree committee
- 2024 USC Price Chief Technology Officer search committee
- 2022-23 USC Healthy Campus built environment and sustainability committee
- 2020–21 USC Price research committee
- 2019–20 USC DUPSA hiring search committee
- 2018–19 Northeastern CSSH standing committee on digital proficiencies and quantitative methods
- 2015–16 UC Berkeley DCRP Ph.D. program admissions committee

### **Doctoral Committees**

Robert Binder, USC Price, exam committee Seongmoon Cho, USC Price, exam committee David Flores Moctezuma, USC Price, exam and dissertation committees Shea Ellen Gilliam, USC Spatial Sciences Institute, dissertation committee James Gross, USC Price, exam and dissertation committees Jaehyun Ha, USC Price, exam and dissertation committees Naomi Lee, USC Price, exam committee Sihan Mao, USC Price, exam committee Thu Nguyen, USC Price, exam committee Clemens Pilgram, USC Price, exam and dissertation committees Marley Randazzo, USC Price, exam committee Qifan Shao, USC Price, exam committee Bonnie Wang, USC Price, exam committee Mengya Xu, USC Spatial Sciences Institute, exam committee and dissertation committees Li Yi, USC Spatial Sciences Institute, exam and dissertation committees Yuquan Zhou, USC Price, exam and dissertation committees

#### **Studio Review Jury**

MIT, Workshop on Geographic Information Systems (Prof. Sarah Williams), Fall 2018

#### PEER REVIEW

**Academic Journal Peer Review** American Behavioral Scientist American Journal of Sociology American Sociological Review Annals of the American Association of Geographers Applied Network Science Case Studies on Transport Policy Cities Computers, Environment and Urban Systems Environment and Planning A: Economy and Space Environment and Planning B: Urban Analytics and City Science Environmental Sociology European Physical Journal: Data Science Geo: Geography and Environment Geographical Analysis International Journal of Geographical Information Science International Planning Studies International Regional Science Review ISPRS International Journal of Geo-Information Journal of the American Planning Association Journal of Open Source Education Journal of Planning Education and Research Journal of Planning Literature

Journal of Transport and Land Use Journal of Transport Geography Journal of Urban Design Journal of Urban History Journal of Urban Technology Journal of Urbanism Landscape and Urban Planning Mathematics Nonlinear Dynamics Physica A: Statistical Mechanics and Its Applications PLOS One Proceedings of the National Academy of Sciences The Professional Geographer Region Research in Transportation Economics Scientific Reports Social Forces Social Indicators Research Socio-Economic Planning Sciences Sustainability Sustainable Cities and Society Town Planning Review Transactions in GIS Transport Findings Transport Policy Transport Reviews Transportation Research Part D: Transport and Environment Transportation Research Record Urban Design International Urban Planning Urban Science Urban Studies **Academic Press Peer Review** 

Cambridge University Press Routledge Springer Nature Taylor & Francis

#### **Funding Agency Peer Review**

Israel Science Foundation National Science Foundation Research Grants Council of Hong Kong Social Sciences and Humanities Research Council of Canada United Arab Emirates University, Office of Associate Provost for Research

#### **MEMBERSHIPS**

American Association of Geographers American Planning Association Association of Collegiate Schools of Planning Association for Computing Machinery Complex Systems Society Network Science Society New York Academy of Sciences Project Management Institute Python Software Foundation Regional Studies Association Urban Affairs Association

#### CREDENTIALS

U.S. Department of Defense secret clearance U.S. Department of Homeland Security public trust Project Management Professional (PMP)

#### CONSULTING

- 2017–19 The Public Good Projects, New York, New York
- 2017–18 Calthorpe Analytics, Berkeley, California
- 2016–18 UrbanSim Inc., Berkeley, California
- 2013–15 Avalon Health Economics, Morristown, New Jersey
- 2013 Raimi & Associates, Berkeley, California
- 2010–11 Voluntary Service Overseas, London, England

#### **PROFESSIONAL EMPLOYMENT**

2009–13 Accenture, New York, New York; London, England; San Diego, California

- 2007–09 Permission Data, New York, New York
- 2004–07 Acumen Inc., Mesa, Arizona

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