Geoff Boeing

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Web: https://geoffboeing.com/

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

ACADEMIC APPOINTMENTS

2019 – University of Southern California

Assistant Professor, Sol Price School of Public Policy

2018–19 Northeastern University

Assistant Professor, School of Public Policy and Urban Affairs

Faculty Affiliate, Network Science Institute

Faculty Affiliate, Global Resilience Institute

Core Faculty, NU Lab for Texts, Maps, and Networks

2017–18 University of California, Berkeley

Postdoctoral Research Fellow, Department of City and Regional Planning

RESEARCH AREAS

Urban informatics and spatial data science: computational statistics, visualization, and spatial analysis Transportation planning: access, equity, street network design, and urban form Housing: emerging technology platforms' impacts on markets, residential mobility, and segregation

PUBLICATIONS

Articles in Peer-Reviewed Journals

- Boeing, G. "Online Rental Housing Market Representation and the Digital Reproduction of Urban Inequality." *Environment and Planning A: Economy and Space* published online before print. doi:10.1177/0308518X19869678
- Boeing, G. "Urban Spatial Order: Street Network Orientation, Configuration, and Entropy." *Applied Network Science* 4 (1), 67. doi:10.1007/s41109-019-0189-1
- Boeing, G. "Spatial Information and the Legibility of Urban Form: Big Data in Urban Morphology." *International Journal of Information Management* published online before print. doi:10.1016/j.ijinfomgt.2019.099

- Boeing, G. "Street Network Models and Measures for Every US City, County, Urbanized Area, Census Tract, and Zillow-Defined Neighborhood." *Urban Science* 3 (1), 28. doi:10.3390/urbansci3010028
- 2019 Padgham, M., 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." *Frontiers in Neurology* 10, 743. doi:10.3389/fneur.2019.00743
- 2018 Boeing, G. "Planarity and Street Network Representation in Urban Form Analysis."

 Environment and Planning B: Urban Analytics and City Science published online before print. doi:10.1177/2399808318802941
- Boeing, G. "Measuring the Complexity of Urban Form and Design." *Urban Design International* 23 (4), 281–292. doi:10.1057/s41289-018-0072-1
- Boeing, G. "A Multi-Scale Analysis of 27,000 Urban Street Networks: Every US City, Town, Urbanized Area, and Zillow Neighborhood." *Environment and Planning B: Urban Analytics and City Science* published online before print. doi:10.1177/2399808318784595
- Boeing, G. "Estimating Local Daytime Population Density from Census and Payroll Data." *Regional Studies, Regional Science* 5 (1), 179–182. doi:10.1080/21681376.2018.1455535
- Boeing, G. "The Effects of Inequality, Density, and Heterogeneous Residential Preferences on Urban Displacement and Metropolitan Structure: An Agent-Based Model." *Urban Science* 2 (3), 76. doi:10.3390/urbansci2030076
- Boeing, G. "Pynamical: Model and Visualize Discrete Nonlinear Dynamical Systems, Chaos, and Fractals." *Journal of Open Source Education* 1 (1), 15. doi:10.21105/jose.00015
- Boeing, G. "OSMnx: New Methods for Acquiring, Constructing, Analyzing, and Visualizing Complex Street Networks." *Computers, Environment and Urban Systems* 65, 126–139. doi:10.1016/j.compenvurbsys.2017.05.004
- Boeing, G. and P. Waddell. "New Insights into Rental Housing Markets across the United States: Web Scraping and Analyzing Craigslist Rental Listings." *Journal of Planning Education and Research* 37 (4), 457–476. doi:10.1177/0739456X16664789
- Boeing, G. "OSMnx: A Python Package to Work with Graph-Theoretic OpenStreetMap Street Networks." *Journal of Open Source Software* 2 (12), 1. doi:10.21105/joss.00215
- Boeing, G. "Honolulu Rail Transit: International Lessons from Barcelona in Linking Urban Form, Design, and Transportation." *Planext* 2, 28–47. doi:10.17418/planext.2016.3vol.02
- Boeing, G. "Visual Analysis of Nonlinear Dynamical Systems: Chaos, Fractals, Self-Similarity, and the Limits of Prediction." *Systems* 4 (4), 37. doi:10.3390/systems4040037
- Boeing, G., D. Church, H. Hubbard, J. Mickens, and L. Rudis. "LEED-ND and Livability Revisited." *Berkeley Planning Journal* 27 (1), 31–55. doi:10.31235/osf.io/jpjhq

Journal Article Manuscripts Under Review

- Boeing, G., J. Wegmann, and J. Jiao. "Rental Housing Spot Markets: How Online Information Exchanges Can Supplement Transacted-Rents Data." Revise and resubmit at *Journal of Planning Education and Research*.
- Boeing, G., M. Besbris, A. Schachter, and J. Kuk. "Housing Search in the Age of Big Data:

- Smarter Cities or the Same Old Blind Spots?" Revise and resubmit at *Housing Policy Debate*, special issue on smart cities.
- Boeing, G. "Urban Street Network Analysis in a Computational Notebook." Under review at *Region: Journal of the European Regional Science Association*, special issue on the potential of notebooks for scientific publication.
- 2019 Kang, W., T. Oshan, L. J. Wolf, G. Boeing, V. Frias-Martinez, S. Gao, A. Poorthuis, W. Xu. "Defining Urban Data Science: A Roundtable Discussion." Under review at *Environment and Planning B: Urban Analytics and City Science*.

Book Chapters

- Boeing, G. "The Morphology and Circuity of Walkable and Drivable Street Networks." In: *The Mathematics of Urban Morphology* (pp. 271–287), edited by L. D'Acci. Basel, Switzerland: Birkhäuser. doi:10.1007/978-3-030-12381-9_12
- Barajas, J. M., G. Boeing, and J. Wartell. "Neighborhood Change, One Pint at a Time: The Impact of Local Characteristics on Craft Breweries." In: *Untapped: Exploring the Cultural Dimensions of Craft Beer* (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/Compendia

- Boeing, G. "Street Network Patterns, Orientation, and Entropy around the World." Transportation Research Board 98th Annual Meeting. Washington, DC. Jan 13–17. https://trid.trb.org/view/1573315
- Boeing, G. "The Relative Circuity of Walkable and Drivable Urban Street Networks." Transportation Research Board 97th Annual Meeting. Washington, DC. Jan 7–11. https://trid.trb.org/view/1495502

Edited Articles and Reviews

- Boeing, G. "Automated Street Network Analysis for Urban Planners with OSMnx." *Planning and Technology Today* 117 (Spring), 10–11. doi:10.31235/osf.io/mkbp3
- Boeing, G. "A Review of the Structure and Dynamics of Cities: Urban Data Analysis and Theoretical Modeling." *Journal of the American Planning Association* 83 (4), 418. doi:10.1080/01944363.2017.1362306
- Boeing, G. "Understanding Cities through Networks and Flows." *Berkeley Planning Journal* 28 (1), 118–123. doi:10.31235/osf.io/mxngm
- Boeing, G. "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 Working Papers

Waddell, P., 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

Patents

Beck, A. E., 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.

Manuscripts in Preparation

- Boeing, G. and W. Riggs. "Converting One-Way Streets to Two-Way Streets to Improve Transportation Network Efficiency and Reduce Vehicle Distance Traveled and Emissions." Target: *Transportation Research Record*, Summer 2019.
- 2019 Kontokosta, C., L. Bettencourt, M. González, S. Williams, and G. Boeing. "Urban Science and Analytics." *Journal of Planning Education and Research*, Fall 2019.
- Boeing, G. "Off the Grid: The Evolution of American Street Network Planning and Design." Target: *Journal of the American Planning Association*, Winter 2019.
- Boeing, G., M. Batty, S. Jiang, D. Mahmoudi. "Urban Analytics." Target: *Handbook of Spatial Analysis in the Social Sciences*, edited by S. Rey and R. Franklin. Cheltenham, UK: Edward Elgar Publishing. Spring 2020.
- Boeing, G. "Street Network Analysis in Urban Science and Planning." Target: *Transactions in GIS*, Spring 2020.

INVITED TALKS

- "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.
- "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.
- "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 (remote/recorded interview). Helsinki, Finland. Nov 16.
- "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.
- "Seeing Cities through New Technologies and Big Data." University of Oregon, School of Planning, Public Policy, and Management. Eugene, Oregon. Jan 25.
- "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.
- "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.

Campus Talks

- 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

Plenary/Keynote Addresses

- "Geographic Information, Spatial Networks, and the New Urban Science." American Association of Geographers Annual Meeting, 8th annual *Transactions in GIS* plenary address. Washington, DC. Apr 3–7.
- 2018 "The Legible and the Illegible: Urban Science, City Design, and Human Circulation." 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

- 2019 "Machine Learning Methods." Association of Collegiate Schools of Planning Annual Conference. Greenville, South Carolina. Oct 24–27.
- 2019 "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

- "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.
- "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.
- "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.

"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 Presentations

Presenting author *italicized*, if other.

- Boeing, G. "The Street Grid and Car Ownership: Trends in US Transportation Network Design." Transportation Research Board 99th Annual Meeting. Washington, DC. Jan 12–16.
- Boeing, G. "Symposium: Setting the Spatial Data Science Agenda." Spatial Data Science Symposium. Santa Barbara, California. Dec 9–11.
- 2019 Boeing, G. "Off the Grid: The Evolution of American Street Network Planning and Design." Association of Collegiate Schools of Planning Annual Conference. Greenville, South Carolina. Oct 24–27.
- Boeing, G. and W. Riggs "Converting One-Way Streets to Two-Way Streets to Improve Transportation Network Efficiency and Reduce Emissions." Association of Collegiate Schools of Planning Annual Conference. Greenville, South Carolina. Oct 24–27.
- Boeing, G. "Urban Spatial Order: Street Network Orientation, Configuration, and Entropy." International Conference on Network Science. Burlington, Vermont. May 27–31.
- Boeing, G. "The Legibility of Urban Form: Spatial Information Platforms and Visualization." International Conference on Urban Experience and Design. Medford, Massachusetts. Apr 26.
- 2019 Boeing, G. "Online Rental Housing Market Representation and the Digital Reproduction of Urban Inequality." Boston Area Research Initiative Annual Conference. Boston, Massachusetts. Apr 26.
- Boeing, G. "The Evolution of American Street Network Design and Planning." Urban Affairs Association Annual Conference. Los Angeles, California. Apr 24–27.
- Abdelkader, A., G. Boeing, *B. T. Fasy*, and D. L. Millman. "Local Persistent Homology-Based Distances between Nonplanar Road Networks." Joint Mathematics Meetings. Baltimore, Maryland. Jan 16–19.
- 2018 *Abdelkader, A.,* 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.
- Boeing, G. "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.
- Waddell, P., 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.
- Boeing, G. "Transportation Network Modeling and Urban Equity." Dukakis Center for Urban and Regional Policy Transportation Equity Conference. Boston, Massachusetts. Oct

19.

- Waddell, P., 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.
- Boeing, G. "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.
- Boeing, G. "Craigslist and U.S. Rental Housing Markets." American Planning Association Annual Conference. Phoenix, Arizona. Apr 2–5.
- Boeing, G. "Understanding Informal Rental Housing Markets through Public Data." American Association of Geographers. San Francisco, California. Mar 29–Apr 2.
- Barajas, J. M., G. Boeing, and *J. Wartell*. "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.
- Boeing, G. "Methods for Measuring the Aggregate Complexity Outcomes of Urban Design." International Conference on Complex Systems. Tempe, Arizona. Sep 28–Oct 2.
- Boeing, G. "Pedagogy of Urban Informatics." Environmental Design Circus. Berkeley, California. Mar 6.
- Boeing, G. 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.
- Boeing, G., 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

2019	Network Science Society Visualization Prize finalist
2018	Information Is Beautiful Awards shortlist
2014	Kaye Bock Award, best journal article
2010	Accenture Inventor Innovation Award

Grants and Fellowships

- 2020 Civic Infrastructure, Domain-Specific Chatbots, and Public Information Dissemination (\$200,000). The Public Good Projects research grant. PI.
- 2019 Urban Form Impact: Humans, Environment, Equity (\$50,000). Northeastern University Tier 1 research grant. Co-PI with Sara Carr and Jana Cephas.
- NU CSSH summer research matching grant (\$6,000). PI.
- NU Lab for Maps, Texts, and Networks research grant (\$2,500). PI.
- 2018 ACSP FWIG Emerging Scholar travel grant (\$500)

2018	NU Lab for Maps, Texts, and Networks travel grant (\$1,000)
2018	Northeastern University research fund (\$25,000)
2017	University of California Doctoral Completion Fellowship (\$36,655)
2016	UC Berkeley DCRP travel grant (\$500)
2016	University of California Graduate Division travel grant (\$900)
2015	UC Berkeley DCRP travel grant (\$500)
2012	University of California Regents' Fellowship (\$158,025/4 years)

TEACHING EXPERIENCE

University of Southern California

Urban Informatics

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

Planetizen

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

SERVICE

Journal Peer Review

American Journal of Sociology Case Studies on Transport Policy

Cities

Computers, Environment and Urban Systems

Environment and Planning B: Urban Analytics and City Science

European Physical Journal: Data Science

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 Transport Geography

Journal of Transport and Land Use

Journal of Urban Technology

Landscape and Urban Planning

Mathematics

Nonlinear Dynamics

PLOS One

Scientific Reports

Social Forces

Social Indicators Research

Sustainable Cities and Society

Transactions in GIS

Transport Findings

Transport Reviews

Transportation Research Record

Urban Design International

Urban Science

Academic Press Peer Review

Cambridge University Press

Funding Agency Peer Review

National Science Foundation

Social Sciences and Humanities Research Council of Canada

Service to Field

Task Force on Outreach and Engagement, Association of Collegiate Schools of Planning, 2019–Program Committee, Future Cities Challenge, 2019–

Review and Appraisal Committee, Association of Collegiate Schools of Planning, 2018–Scientific Committee, Symposium on Simulation for Architecture and Urban Design, 2018–Book review editor, *Berkeley Planning Journal*, 2013–14

Service to Department

Standing Committee on Digital Proficiencies and Quantitative Methods, NU CSSH, 2018–19 Ph.D. program faculty representative, UC Berkeley DCRP, 2015–16 Ph.D. program admissions committee, UC Berkeley DCRP, 2015–16

Studio Review Jury

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

PROFESSIONAL AFFILIATIONS

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 ENGAGEMENTS

2017–19 The Public Good Projects

2017–18 Calthorpe Analytics

2016-18 UrbanSim Inc.

2013–18 Avalon Health Economics

2013 Raimi & Associates

2009-13 Accenture

PROFESSIONAL EXPERIENCE

- 2009–13 Accenture, Consultant and Project Manager London, England; New York, New York; San Diego, California
- 2007–09 Permission Data, Front-End Systems Product Manager New York, New York
- 2004–07 Acumen Inc., Web Systems Developer Mesa, Arizona

SELECTED MEDIA COVERAGE

Complete listing and links available at https://geoffboeing.com/press/

- 2019 *PBS NOVA*. "With 'Problems Out There Waiting for Us,' Public Health Practitioners Turn to AI for Help." Apr 11.
- 2018 *CityLab.* "Visualizing the Hidden Logic of Cities." Jul 26.
- 2018 *99 Percent Invisible.* "On the Grid: Visualizing Street Network Orientations Across 50 Global Cities." Jul 20.
- 2018 Slate. "Elegant Graphs Reduce 25 American Cities to Their Design Essence." Jul 11.
- The San Francisco Chronicle. "Stunning, Simple Maps Show San Francisco versus Other Global Cities." Jun 19.
- Forbes. "Understanding Our Cities, Thanks to Beautiful Maps." Feb 7.
- 2017 Fast Company. "Turn Your Local Streets into a Map That Reveals the Character of Your Neighborhood." Feb 6.
- 2017 *CityLab.* "A Digital Window into Your City's Urban Form." Jan 17.
- The Washington Post. "What More Than 1 Million Craigslist Rental Listings Tell Us about the Housing Market." Sep 1.
- Fast Company. "11 Million Craigslist Ads Show Which Cities Have the Highest Rents." Sep 1.
- 2016 NextCity. "What 11 Million Craigslist Posts Show About Affordable Housing." Aug 26.

TECHNICAL SKILLS

Statistical and Computational Methods

Computational statistics and machine learning, systems analysis, data mining, data wrangling, Python (including numpy, scipy, pandas, matplotlib, statsmodels, networkx, and scikit-learn), JavaScript, HTML, web scraping, MySQL, Postgres, and various other databases.

Geospatial Methods

Spatial analysis, network analysis, PostGIS, QGIS, geopandas, PySAL, Leaflet, CARTO, agent-based spatial modeling and microsimulation. I developed and maintain the OSMnx street network modeling software.