### CONSTANTINE E. KONTOKOSTA, PhD, PE

# Marron Institute for Urban Management

**New York University** 

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### ACADEMIC AND LEADERSHIP POSITIONS (since PhD)

#### **Current Appointments New York University** 2019-Associate Professor of Urban Science and Planning, Marron Institute of Urban Management 2019-Director, Civic Analytics Program, Marron Institute of Urban Management 2019-Associated Faculty, Center for Urban Science and Progress (cross-appointment) 2019-Associated Faculty, Department of Civil and Urban Engineering (cross-appointment) 2016-Director, Urban Intelligence Lab 2014-Head/Principal Investigator, Quantified Community Affiliated & Visiting Faculty and Research Positions 2018-Senior Scholar, New York Academy of Medicine 2017-Affiliated Faculty, Wagner School of Public Service 2016-Visiting Professor, Department of Computer Science, University of Warwick **Previous Appointments New York University** 2012-2018 Deputy Director/Deputy Director for Academics, Center for Urban Science and Progress, (part of the Founding Leadership Team, launched April 2012) Assistant Professor of Urban Informatics (tenure-track, joint position), Department of 2014-2018 Civil and Urban Engineering, Tandon School of Engineering and Center for Urban Science and Progress 2009-2014 Founding Director, Center for the Sustainable Built Environment Research Associate Professor, Department of Civil and Urban Engineering, NYU Tandon 2013-2014 School of Engineering Adjunct Associate Professor of Urban Planning, Wagner School of Public Service 2012-2014 Clinical Associate Professor, Schack Institute of Real Estate 2011-2012 **EDUCATION** Columbia University, Urban Planning (Minor: Econometrics) 2011 PhD M.Phil Columbia University, Urban Planning 2007 Columbia University, Urban Planning (Computational Methods) 2005 M.S. New York University, Real Estate Finance and Economics 2003 M.S. 1998 **B.S.E.** University of Pennsylvania, Systems Science and Engineering ACADEMIC HONORS AND FELLOWSHIPS 2018-2021 Senior Scholar, New York Academy of Medicine Fellow, Urban Design Forum 2018 2017-2022 National Science Foundation (NSF) CAREER Award

Goddard Junior Faculty Fellowship, New York University

Azure for Research Award, Microsoft Research

2017

2017

2017	Best Project Award, United Nations Data for Climate Action Challenge
2017	Waze Research Pilot Program Award, Google (full access to global Waze data)
2016	IoT Research Award, Google
2015-2016	Faculty Engineer in Residence, NYU Incubators
2015	Best Paper Award, Bloomberg Data for Good Symposium
2015	Real Green Research Challenge Award, CBRE, Inc.
2014	IBM Faculty Award
2013	Finalist, Grand Challenge Research Award, NYU
2012	Alumni Recognition for Achievements in Science, Riverdale Country School, Bronx, NY
2012	Elected to Fellow of the Royal Institution of Chartered Surveyors
2012	Teaching Excellence Award, New York University (SPS)
2010	Outstanding Service Award, New York University (SPS)
2010, 2012	Climate, Buildings, and Behavior Scholarship, Garrison Institute
2009-2014	Fulbright Senior Specialist in Urban Planning, J. William Fulbright Foreign Scholarship
	Board/CEIS
2009-2010	C. Lowell Harriss Dissertation Fellowship, Lincoln Institute of Land Policy
2009-2010	Dissertation Research Grant, Graduate School of Arts and Sciences, Columbia University
2008-2010	Doctoral Dissertation Research Grant, U.S. Department of Housing and Urban
	Development (HUD)
2007-2009	Housing and Community Development Research Fellow, Citizens Housing and Planning
	Council
2007	Graduate Student Scholarship, American Society of Civil Engineers / Engineers without
	Borders USA
2006	New Scholar Workshop Invited Participant, Journal of Planning Education and Research
2005-2010	University Fellowship (5-year award), Graduate School of Arts and Sciences, Columbia
	University (full tuition and stipend for five years)
2005	Charles Abrams Award for Social Justice Research Thesis, Graduate School of
	Architecture, Planning, and Preservation, Columbia University
2001-2003	Dean's Fellowship (multi-year, merit-based award), New York University

### **PUBLICATIONS**

(<u>underline</u> denotes supervised student and *italics* denotes supervised research scientist/postdoc; corresponding author in **bold**)

### Books

- 1. **Kontokosta, Constantine E.** In contract. *Big Data and Climate Action: Decision-Making in the Age of Informatics.* London: Routledge.
- 2. **Kontokosta, Constantine E.** and Colin Harrison, eds. 2019. *Urban Intelligence: How Data and Information Can Shape Urban Planning, Design, and City Operations*. London: Routledge. (forthcoming).

### **Peer-reviewed Journal Articles**

- 3. <u>Papadopoulos, Sokratis</u> and **Constantine E. Kontokosta**. 2018. "Grading Buildings on Energy Performance: Leveraging City Benchmarking Data and Statistical Learning to Overcome Uncertainty," *Applied Energy*, in press. (IF = 7.900)
- 4. *Bonczak, Bartosz* and **Constantine E. Kontokosta**. 2018. "Large-scale Parameterization of 3D Building Morphology in Complex Urban Landscapes Using Aerial LiDAR and City Administrative Data," *Computers, Environment, and Urban Systems*, in press. (IF = 3.724)

- 5. <u>Lai, Yuan</u> and **Constantine E. Kontokosta**. 2018. "Quantifying Place: Analyzing the Drivers of Pedestrian Activity at High Spatial Resolution," *Landscape and Urban Planning*, 180: 166-178. (IF = 4.994) <u>doi.org/10.1016/j.landurbplan.2018.08.018</u>
- 6. **Kontokosta, Constantine E.** 2018. "Urban Informatics in the Science and Practice of Planning," *Journal of Planning Education and Research*, in press. (IF = 2.328) doi.org/10.1177/0739456X18793716
- 7. *Traunmueller, Martin*, Nicholas Johnson, Awais Malik, and Constantine E. Kontokosta. 2018. "Digital Footprints: Using WiFi Probe and Locational Data to Analyze Human Mobility Trajectories in Cities," *Computers, Environment, and Urban Systems*, 72: 4-12. (IF = 3.724) doi.org/10.1016/j.compenvurbsys.2018.07.006
- 8. <u>Johnson, Nicholas, Bartosz Bonczak</u>, and **Constantine E. Kontokosta**. 2018. "Using a gradient boosting model to improve the performance of low-cost aerosol monitors in a dense, heterogeneous urban environment," *Atmospheric Environment*, 184: 9-16. (IF = 3.708) doi.org/10.1016/j.atmosenv.2018.04.019
- 9. <u>Papadopoulos, Sokratis, Bartosz Bonczak</u>, and **Constantine E. Kontokosta**. 2018. "Pattern Recognition in Building Performance over Time Using Energy Benchmarking Panel Data," *Applied Energy*, 221: 576-586. (IF = 7.900) <u>doi.org/10.1016/j.apenergy.2018.03.079</u>
- 10. **Kontokosta, Constantine E.**, <u>Boyeong Hong</u>, <u>Nicholas Johnson</u>, and <u>Daniel Starobin</u>. 2018. "Using Machine Learning and Small Area Estimation to Predict Building-Level Municipal Solid Waste Generation in Cities," *Computers. Environment, and Urban Systems*, 70: 151-162. (IF = 3.724) <u>doi.org/10.1016/j.compenvurbsys.2018.03.004</u>
- 11. Falcocchio, Giancarlo, <u>Awaik Malik</u>, and **Constantine E. Kontokosta**. 2018. "A Data-Driven Methodology for Equitable Value-Capture Financing of Public Transit Operations and Maintenance," *Transport Policy*, 66: 107-115. (IF = 2.512) <u>doi.org/10.1016/j.tranpol.2018.02.005</u>
- 12. <u>Hong, Boyeong, Awais Malik, Jack Lundquist,</u> Ira Bellach, and **Constantine E. Kontokosta.** 2018. "Applications of Machine Learning Methods to Predict Re-admission and Length-of-Stay for Homeless Families: The Case of WIN Shelters in New York City," *Journal of Technology in Human Services*, 36: 89-104. (*invited, peer-reviewed special issue*) doi.org/10.1080/15228835.2017.1418703
- 13. **Kontokosta, Constantine E.** and <u>Awais Malik</u>. 2018. "The REDI Score: Applying Big Data to the Quantification and Validation of Neighborhood Resilience Capacity," *Sustainable Cities and Society*, 36: 272-285. (IF = 3.073) <u>doi.org/10.1016/j.scs.2017.10.025</u>
- 14. Wang, Lingjing, Cheng Qian, **Constantine E. Kontokosta**, and Stanislav Sobolevsky. 2017. "Structure of 311 Requests as a Signature of Urban Location," *PLOS ONE*, 12(10): e0186314. (IF =2.806) doi.org/10.1371/journal.pone.0186314
- 15. <u>Papadopoulos, Sokratis</u>, Elie Azar, Wei-Lee Woon, and **Constantine E. Kontokosta**. 2017. "Evaluation of tree-based ensemble learning algorithms for building energy performance estimation," *Journal of Building Performance Simulation*, 11: 322-332. (IF = 2.874) <u>doi.org/10.1080/19401493.2017.1354919</u>

- 16. **Kontokosta, Constantine E.** and <u>Christopher Tull</u>. 2017. "A Data-Driven Predictive Model of City-Scale Energy Use in Buildings," *Applied Energy*, 197: 303-317. (IF = 7.900) doi.org/10.1016/j.apenergy.2017.04.005
- 17. Reina, Vincent and **Constantine E. Kontokosta**. 2017. "Low hanging fruit? Regulations and energy efficiency in subsidized multifamily housing," *Energy Policy*, 106: 505-513. (IF = 4.039) doi.org/10.1016/j.enpol.2017.04.002
- 18. **Kontokosta, Constantine E.** and <u>Nicholas Johnson</u>. 2017. "Urban Phenology: Toward a Real-Time Census of the City using WiFi Data," *Computers, Environment, and Urban Systems*, 64: 14-153. (IF = 3.724) doi.org/10.1016/j.compenvurbsys.2017.01.011
- 19. **Kontokosta, Constantine E.** 2016. "Modeling the Energy Retrofit Decision in Commercial Office Buildings," *Energy and Buildings*, 131: 1-20. (IF = 4.457) <u>doi.org/10.1016/j.enbuild.2016.08.062</u>
- 20. *Marasco*, *Daniel* and **Constantine E. Kontokosta**. 2016. "Applications of machine learning methods for identifying building energy conservation measure opportunities in New York City," *Energy and Buildings*, 128: 431-441. (IF = 4.457) <u>doi.org/10.1016/j.enbuild.2016.06.092</u>
- 21. **Kontokosta, Constantine E.** 2016. "The Quantified Community and Neighborhood Labs: A Framework for Computational Urban Science and Civic Technology Innovation," *Journal of Urban Technology*, 23: 67-84. (IF = 3.213) <a href="https://doi.org/10.1080/10630732.2016.1177260">doi.org/10.1080/10630732.2016.1177260</a>
- 22. **Kontokosta, Constantine E.** and *Rishee Jain*. 2015. "Modeling the Determinants of Large-Scale Building Water Use: Implications for Data-Driven Urban Sustainability Policy," *Sustainable Cities and Society*, 18: 44-55. (IF = 3.073) doi.org/10.1016/j.scs.2015.05.007
- 23. **Kontokosta, Constantine E.** 2015. "Do Inclusionary Zoning Policies Disperse Affordable Housing? A Comparative Spatial Analysis," *Journal of Housing and the Built Environment*, 30: 569-590. (IF = 1.329) doi.org/10.1007/s10901-014-9430-5
- 24. **Kontokosta, Constantine E.** 2015. "A Market-Specific Methodology for a Commercial Building Energy Performance Index," *Journal of Real Estate Finance and Economics*, 51: 288-316. (IF = 1.136) doi.org/10.1007/s11146-014-9481-0
- 25. *Jain, Rishee*, Jose Moura, and **Constantine E. Kontokosta**. 2014. "Big Data and Big Cities: Graph Signals of Urban Air Pollution," *IEEE Signal Processing Magazine*, 31: 130-136. (IF = 9.654) 10.1109/MSP.2014.2330357
- 26. Fuerst, Franz, **Kontokosta, Constantine E.**, and McAllister, Patrick M. 2014. "Determinants of Green Building Adoption," *Environment and Planning B: Urban Analytics and City Science*, 41: 551-570. (IF = 2.046) doi.org/10.1068/b120017p
- 27. **Kontokosta, Constantine E.** 2014. Mixed-Income Housing and Neighborhood Integration: Evidence from Inclusionary Zoning Programs. *Journal of Urban Affairs*, 36: 716-741. (IF = 1.151) doi.org/10.1111/juaf.12068
- 28. **Kontokosta, Constantine E.** 2013. "Energy Disclosure, Market Behavior, and the Building Data Ecosystem," *Annals of the New York Academy of Sciences*, 1295: 34-43. (IF = 4.277) doi.org/10.1111/nyas.12163

- 29. **Kontokosta, Constantine E.** 2013. "Tall Buildings and Urban Expansion: Tracing the History of Zoning in the United States," *ASCE Journal of Leadership and Management in Engineering*, 13: 190-198.
- 30. **Kontokosta, Constantine E.** 2012. "The Price of Victory: The Impacts of the Olympic Games on Residential Real Estate Markets," *Urban Studies*, 49: 961-978. (IF = 2.604) doi.org/10.1177/0042098011411952
- 31. **Kontokosta, Constantine E.** 2011. "Greening the Regulatory Landscape: The Spatial and Temporal Diffusion of Green Building Policies in U.S. Cities," *Journal of Sustainable Real Estate*, 3: 68-90. doi.org/10.5555/jsre.3.1.hx085737n8325333

# Papers under review

- 32. **Kontokosta, Constantine E**. and <u>Boyeong Hong</u>. "Equity and Bias in 311 Data: Evaluating the Socio-Spatial Variations in the Propensity to Complain," under review.
- 33. <u>Lai, Yuan</u> and **Constantine E. Kontokosta**, "The Impact of Urban Street Tree Species on Air Quality and Respiratory Illness: A Spatial Analysis of Large-Scale, High Resolution Urban Data," under review.
- 34. <u>Johnson, Nicholas</u> and **Constantine E. Kontokosta**, "Urban Sensing and Citizen Science in Low-Income Communities: Limits and Opportunities," under review.
- 35. <u>Kats, Phillip</u>, Cheng Qian, **Constantine Kontokosta**, and Stanislav Sobolevsky, "Twitter Activity Timeline as a Signature of Urban Neighborhoods," under review.
- 36. **Kontokosta, Constantine E.**, Danielle Spiegel-Feld, and <u>Sokratis Papadopoulos</u>. "Do Energy Disclosure Policies Work? Evidence from Mandatory and Voluntary Energy Reporting Programs," under review.
- 37. **Kontokosta, Constantine E.** and *Bartosz Bonczak*. "Using LiDAR to Measure Urban Morphology: Implications for Energy Efficiency," under review.
- 38. **Kontokosta, Constantine E.**, Vincent Reina, and *Bartosz Bonczak*. "Energy Cost Burdens for Low-Income Households in Six U.S. Cities: Implications for Housing Affordability," under review.

# **Peer-reviewed Conference Proceedings**

- 39. **Kontokosta, Constantine E.**, <u>Yuan Lai</u>, <u>Bartosz Bonczak</u>, <u>Sokratis Papadopoulos</u>, <u>Boyeong Hong</u>, <u>Awais Malik</u>, and <u>Nicholas Johnson</u>. 2018. "A Dynamic Spatial-Temporal Model of Urban Carbon Emissions for Data-Driven Climate Action by Cities," *Proceedings of the 2018 Bloomberg Data for Good Exchange Conference*, New York, NY.
- 40. **Kontokosta, Constantine E.** and <u>Boyeong Hong</u>. 2018. "Who Calls for Help? Statistical Evidence of Disparities in Citizen-Government Interactions Using Geospatial Survey and 311 Data from Kansas City," *Proceedings of the 2018 Bloomberg Data for Good Exchange Conference*, New York, NY.
- 41. <u>Papadopoulos, Sokratis</u> and **Constantine E. Kontokosta**. 2018. "Revisiting city energy performance grading: The inadequacy of current standards and the potential of big data," *Proceedings of the 3<sup>rd</sup> International Graduate Student Symposium of the PhD Program, IIT College of Architecture*, Chicago, IL.

- 42. **Kontokosta, Constantine E.**, <u>Boyeong Hong</u>, and <u>Kristi Korsberg</u>. 2017. "Equity in 311 Reporting: Understanding Socio-Spatial Differentials in the Propensity to Complain," *Proceedings of the 2017 Bloomberg Data for Good Exchange Conference*, New York, NY.
- 43. **Kontokosta, Constantine E.**, <u>Boyeong Hong</u>, <u>Awais Malik</u>, Ira Bellach, <u>Xueqi Huang</u>, <u>Kristi Korsberg</u>, <u>Dara Perl</u>, and <u>Avikal Somvanshi</u>. 2017. "Predictors of Re-Admission for Homeless Families in New York City: The Case of the Win Shelter Network," *Proceedings of the 2017 Bloomberg Data for Good Exchange Conference*, New York, NY.
- 44. <u>Lai, Yuan</u> and **Constantine E. Kontokosta**. 2017. "Measuring the Impact of Urban Street Trees on Air Quality and Respiratory Illness: A Data-Driven Approach to Environmental Justice," *Proceedings of the 2017 Bloomberg Data for Good Exchange Conference*, New York, NY.
- 45. Traunmueller, Martin, Nicholas Johnson, Awais Malik, and Constantine E. Kontokosta. 2017. "Digital Traces: Modeling Urban Mobility using Wifi Probe Data," Proceedings of the 6th International Workshop on Urban Computing, ACM SIGKDD 2017.
- 46. **Kontokosta, Constantine E.** 2017. "Urban Informatics for Social Good," *Proceedings of the Second International Workshop on Science of Smart City Operations and Platforms Engineering, Cyber Physical Systems Week*, Pittsburgh, PA.
- 47. Qian, Cheng, Phillip Kats, Sergey Malinchik, Mark Hoffman, Brian Kettler, Constantine E. Kontokosta, and Stanislav Sobolevsky. 2017. "Geo-tagged Social Media Data as a Proxy for Urban Mobility. Advances in Cross-Cultural Decision Making: Proceedings of the AHFE 2017 International Conference, Los Angeles, California, 610: 29. Springer.
- 48. <u>Papadopoulos, S.</u>, & **Kontokosta, Constantine E**. 2017. "Big Buildings and Big Data: Do Energy Disclosure Policies Impact Energy Use over Time?" In *Computing in Civil Engineering 2017*.
- 49. **Kontokosta, Constantine E.,** *Bartosz Bonczak*, and <u>Sokratis Papadopoulos</u>. 2017. "Spatial and Geographic Patterns of Building Energy Performance: A Cross-City Comparative Analysis of Large-Scale Data," *American Society of Civil Engineers (ASCE) International Conference on Sustainable Infrastructure*, New York, NY.
- 50. <u>Awais Malik</u> and **Constantine E. Kontokosta.** 2017. "Measuring Building Risk and Resilience: A Big Data Approach to Risk Analytics for Infrastructure," *American Society of Civil Engineers* (ASCE) International Conference on Sustainable Infrastructure, New York, NY.
- 51. **Kontokosta, Constantine E.** and *Bartosz Bonczak*. 2017. "Using LiDAR Point Cloud Data to Model and Measure Urban Morphology: An Informatics Approach to Building Volumetry," *Proceedings of the International Conference on Civil and Building Engineering Informatics*. (accepted, did not present)
- 52. **Kontokosta, Constantine E.**, <u>Nicholas Johnson</u>, and Anthony Schloss. 2016. "The Quantified Community at Red Hook: Urban Sensing and Citizen Science in Low-Income Neighborhoods," *Proceedings of the 2016 Bloomberg Data for Good Exchange Conference*.
- 53. **Kontokosta, Contantine E.**, *Bonczak, Bartosz*, and Duer-Balkind, Marshall. 2016. "DataIQ: Measuring Data Quality and Reliability of Self-Reported Energy Benchmarking Data," *Proceedings of the ACEEE Summer Study on Energy Efficiency in Buildings*.

- 54. **Kontokosta, Constantine E.** and <u>Christopher Tull</u>. 2016. "EnergyViz: Web-Based Eco-Visualization of Urban Energy Use from Building Benchmarking Data," *Proceedings of the International Conference on Computing in Civil and Building Engineering*.
- 55. **Kontokosta, Constantine E.** and <u>Christopher Tull</u>. 2015. "Web-Based Visualization and Prediction of Urban Energy Use from Building Benchmarking Data," *Proceedings of the 2015 Bloomberg Data for Good Exchange Conference*. (best paper award)
- 56. Jain, Rishee, Theodoros Damoulas, and Constantine E. Kontokosta. 2014. "Towards Data-Driven Energy Consumption Forecasting of Multi-Family Residential Buildings: Feature Selection via The Lasso," Proceedings of the 2014 ASCE International Conference on Computing in Civil and Building Engineering, 1675-1682.
- 57. **Kontokosta, Constantine E.** 2014. "Urban Quantified Community," *Proceedings of the NIST-ASCE-ASME Workshop on Sustainability Measurement Science*, Reston, VA.
- 58. **Kontokosta, Constantine E.** 2013. "Is There a Link Between Energy Performance and Asset Value? Modeling the Determinants of Commercial Building Energy Efficiency," *Real Estate Research Institute Conference*.
- 59. **Kontokosta, Constantine E.** 2013. "Do Owners and Tenants Value Commercial Building Energy Performance?" *Massachusetts Institute of Technology-National University of Singapore-Maastricht University Research Symposium*.
- 60. **Kontokosta, Constantine E.** 2012. "Predicting Building Energy Efficiency Using New York City Benchmarking Data," *Proceedings of the ACEEE Summer Study on Energy Efficiency in Buildings*.
- 61. **Kontokosta, Constantine E.** 2009. "Equity and Efficiency in Urban Competition: The Case of the Olympic Games," *Economics of the Olympic Games Conference, University of Groningen*.

### **Book Chapters**

- 62. **Kontokosta, Constantine E.,** Jeff Merritt, and Sander Dolder. 2018. "Solving City Challenges through Neighborhood Innovation Labs: Moving from Smart Cities to Informed Communities," in *Smarter New York City: How City Agencies Innovate*, André Corrêa d'Almeida, ed. New York: Columbia University Press.
- 63. **Kontokosta, Constantine E.** Forthcoming. "Analytics for Public Finance and Economic Development." In *Urban Intelligence: How Data and Information Can Shape Urban Planning, Design, and City Operations*, Constantine E. Kontokosta and Colin Harrison, eds. New York: Routledge.
- 64. **Kontokosta, Constantine E.** Forthcoming. "Data-Driven Urban Sustainability Policy and Planning." In *Urban Intelligence: How Data and Information Can Shape Urban Planning, Design, and City Operations*, Constantine E. Kontokosta and Colin Harrison, eds. New York: Routledge.
- 65. Harrison, Colin and **Kontokosta, Constantine E.** Forthcoming. "Introduction to Urban Information." In *Urban Intelligence: How Data and Information Can Shape Urban Planning, Design, and City Operations*, Constantine E. Kontokosta and Colin Harrison, eds. New York: Routledge.

66. **Kontokosta, Constantine E.** 2009. "Developer," in *Encyclopedia of Urban Studies*. Ed. Ray Hutchison. Newbury Park, CA: Sage Publications.

# **Case and Teaching Materials**

67. **Kontokosta, Constantine E.**, Mitchell Weiss, Christine Snively, and Sarah Gulick. 2017. "NYC311," Harvard Business School Case 818-056, November.

### **Technical Reports and Other Significant Publications**

- 68. City of New York. 2017. *New York City's Energy and Water Use Report 2017*. New York: Mayor's Office of the City of New York (co-author and lead data scientist).
- 69. Commercial Data Working Group. 2017. *Commercial Real Estate Data: Towards Parity with Other Asset Classes*. University of North Carolina, Kenan-Flagler Business School Working Paper.
- 70. **Kontokosta, Constantine E.**, John Lee, and Russell Unger. 2016. *New York City's Energy and Water Use Report*. New York: Mayor's Office of the City of New York.
- 71. **Kontokosta, Constantine E.** 2016. "Building Efficiency: The Case for Data and Cities," *Issues in Science and Technology*. Fall 2016.
- 72. **Kontokosta, Constantine E.** 2016. "Urban Planning in the Informatics Age," *NYU Digital Humanities*, invited blog post.
- 73. **Kontokosta, Constantine E.**, <u>Awais Malik</u>, and <u>Christopher Tull</u>. 2015. *Spatial Analysis of Commercial Waste Haulers and Waste Generation Rates in NYC*. Report to the NYC Business Integrity Commission.
- 74. **Kontokosta, Constantine E.**, et al. 2015. *Benchmarking and Data Quality Analysis of Energy Disclosure Data for Washington, DC*. Report to the Washington, DC District Department of the Environment.
- 75. Koonin, Steven E. and **Constantine E. Kontokosta**. 2015. *Urban Electrification*. Report to the President's Council of Advisors on Science and Technology (PCAST), Executive Office of the President.
- 76. **Kontokosta, Constantine E.** 2015. "Data and the City: The Promise and Perils of Urban Informatics," *Sallan Foundation Snapshot*, July 7.
- 77. **Kontokosta, Constantine E.** and <u>Awais Malik</u>. 2015. The Resilience to Disasters and Emergencies Index (REDI): A Methodology for Quantifying Community Resilience Capacity. Report to the New York State Office of Storm Recovery.
- 78. **Kontokosta, Constantine E.**, <u>Eduardo Franco</u>, and <u>Anjali Mehta</u>. 2015. *Tenant Star: Commercial Tenant Energy Performance Rating Model (Asset Manager Section)*. Report to CB Richard Ellis, Real Green Research Challenge.
- 79. **Kontokosta, Constantine E.** and *Daniel Marasco*. 2014. *NYSERDA Home Performance with Energy Star Program Analysis and Predictive Modeling*. Report to the New York State Energy Research and Development Authority and the New York State Office of the Governor.

- 80. City of New York. *New York City Local Law 84 Benchmarking Report*, 2014. New York, NY: Mayor's Office of Long-Term Planning and Sustainability, September (Provided data analysis and policy recommendations).
- 81. **Kontokosta, Constantine E.** 2013. Structure for National Reports on Buildings & Climate Change: Energy & GHG Baseline and Reduction Potential for the U.S. Building Sector. Paris: United Nations Environment Programme.
- 82. City of New York. 2013. *New York City Local Law 84 Benchmarking Report, September 2013*. New York, NY: Mayor's Office of Long-Term Planning and Sustainability. (Provided data analysis with David Hsu).
- 83. **Kontokosta, Constantine E.** 2013. *Local Law 84 Energy Benchmarking Data:* 2<sup>nd</sup> *Year Analysis*. Report to the New York City's Mayor's Office of Long-Term Planning and Sustainability. (Provided data analysis with David Hsu).
- 84. <u>Lester, Danielle, Kimberly Gift, Sarah Xu</u>, and **Constantine E. Kontokosta**. 2013. *Energy Efficiency Portfolio Analysis of NYU Facilities*. Report to the NYU Office of Facilities and Construction Management and NYU Office of Sustainability. New York, NY: NYU Center for the Sustainable Built Environment.
- 85. City of New York. 2012. New York City Local Law 84 Benchmarking Report, August 2012. New York, NY: Mayor's Office of Long-Term Planning and Sustainability. (Provided data analysis with David Hsu).
- 86. **Kontokosta, Constantine E.** 2012. *Local Law 84 Energy Benchmarking Data*. Report to the New York City's Mayor's Office of Long-Term Planning and Sustainability.
- 87. **Kontokosta, Constantine E.** 2012. "Market Transformation through Information: The Role of Building Energy Performance Data in Reducing Global Greenhouse Gas Emissions," *UN Global Forum on Human Settlements: World Best Practices*, 12: 93-98.
- 88. **Kontokosta, Constantine E.** 2012. "Leveraging Capital Markets for Energy Efficient Building Retrofits," *MODUS Americas (Journal of the Royal Institution of Chartered Surveyors)*, May.
- 89. **Kontokosta, Constantine E.** 2012. "Market View: Building the Smart City," *Commercial Property Executive*, April.
- 90. **Kontokosta, Constantine E.** 2011. "The Emerging Market for Building Energy Retrofits: Navigating the Investment Frontier," *Real Estate Finance Intelligence*, August.
- 91. **Kontokosta, Constantine E.** 2011. "The Diffusion of Green Building Policies in U.S. Cities," *Premises (NYU Schack Institute Research Journal)* 1: 6-9.
- 92. **Kontokosta, Constantine E.** 2009. "The Neighborhood Revitalization Index," Citizens Housing and Planning Council White Paper.
- 93. **Kontokosta, Constantine E.** et al. 2009. *Suffolk County Planning Commission Guidelines*. Hauppauge, NY: Suffolk County Planning Department.

# RESEARCH FUNDING AWARDED

(	%	indicates	portion	of the	award to	my research	group)

2018-2020	PI: Making Local Governments' Housing Quality Maintenance Systems Fairer and More
	Efficient (Co-PIs: Been, NYU Law; Thorpe, NYU Medicine; Neill, NYU Wagner)
	Sponsor: NYU Marron Institute
	Funding Amount: \$50,000 (50%)
2018-2019	PI: Estimating Office and Residential Building Energy Retrofit Hurdle Rates and Risk
	Arbitrage in Energy Efficiency Investments (Co-PIs: Pivo, U. of Arizona; Sagi, UNC-
	Kenan-Flagler; Fuerst, Cambridge)
	Sponsor: Real Estate Research Institute and Lawrence Berkeley National
	Laboratory
	Funding Amount: \$50,000 (80%)
2018-2019	PI: Take the Q Train: Value Capture of Public Infrastructure Projects (Co-PIs: Gupta,
2010-2017	NYU Stern; Van Nieuwerburgh, Columbia)
	Sponsor: Lincoln Institute of Land Policy
	Funding Amount: \$50,000 (50%)
2018-2019	
2010-2019	<b>Co-PI</b> : Assessing the Impact of New York City's Energy Audit Requirement on Building Energy Use (PI: Wyman, NYU Law)
	Sponsor: Sloan Foundation Funding Amount: \$20,000 (50%)
2018-2019	Investigator: Grid Dynamics and Energy Consumption Patterns through Remote
2010-2019	Observations of City Light (PI: Bianco, NYU CUSP; Co-PI: Dobler, NYU CUSP)
	Sponsor: U.S. Department of Energy, ARPA-E
	Funding Amount: \$500,000 (10%)
2017-2022	PI: CAREER: Urban Informatics for Smart, Sustainable Cities: Toward a Data-Driven
2017-2022	Understanding of Metropolitan Energy Dynamics
	Sponsor: National Science Foundation
	Funding Amount: \$510,313 (100%)
2017-2020	PI for sub-award: C2SMART (PI: Ozbay, NYU Tandon)
2017-2020	Sponsor: U.S. Department of Transportation
	Funding Amount: \$287,794 (100%) (sub-award)
2017-2018	PI: Quantified Community Analytics and Environmental Sensing Project
2017-2016	Sponsor: The Trust for Governor's Island
	Funding Amount: \$70,000 (100%)
2016-2018	Co-PI: Economics Impacts of Smart City Technologies (PI: Sobolevsky, NYU CUSP)
2010-2016	Sponsor: Future Cities Catapult
	Funding Amount: \$184,000 (80%)
2016-2018	PI: Civic Analytics and Urban Data Science
2010-2016	Sponsor: John D. and Catherine T. MacArthur Foundation
	Funding Amount: \$250,000 (100%)
2016-2018	PI: Data-Driven Urban Sustainability and Climate Mitigation Policy
2010-2016	Sponsor: New York City Mayor's Office of Sustainability
	•
2016-2018	Funding Amount: \$233,100 (100%)  PI: Machine Learning and Big Data for Building Energy Informatics
2010-2018	
	Sponsor: Siemens Corp.
2016-2018	Funding Amount: \$140,000 (100%)  Pt. Prodictive Models for Urban Building Pick and Paciliance
2010-2018	PI: Predictive Models for Urban Building Risk and Resilience
	Sponsor: AIG Science  Funding Amount: \$134,000 (awarded, pending centrage execution)
	Funding Amount: \$134,000 (awarded, pending contract execution)

2016-2017	<b>Co-PI</b> : UVNets: Urban Vulnerability Networks (PI: Sobolevsky, NYU CUSP) Sponsor: <b>Lockheed Martin Corp.</b> Funding Amount: \$85,000 (75%)
2016-2017	PI: CommunitySense: Using IoT for Real-Time Citizen Science Sponsor: Google, Inc.
2016-2017	Funding Amount: \$50,000 (in-kind equipment and software/cloud services) (100%) Co-PI: Multilayered Social Media Urban Analytics System for Identifying Disruptions in NYC Local Urban Function (PI: Sobolevsky, NYU CUSP)
	Sponsor: University Research Challenge Fund, NYU Funding Amount: \$13,000 (75%)
2015-2017	PI for NYU sub-award: Big Data Hub – Northeast Region (PI: McKeown, Columbia) Sponsor: National Science Foundation
2015-2017	Funding Amount: <b>total award \$1,600,000; sub-award: \$60,000 (100%) Co-PI</b> : On-Call Management and Economic Development Consulting Services (PI: Koonin, NYU CUSP)
	Sponsor: New York City Economic Development Corporation
2015 2016	Funding Amount: N/A  PI. Francy Performance Data Quality and Peliability Analytics
2015-2016	PI: Energy Performance Data Quality and Reliability Analytics, Sponsor: District of Columbia, District Department of Environment
	Funding Amount: \$68,839 (100%)
2014-2016	PI: Tenant Energy Performance Recognition and Rating Model and Analytics
	Sponsor: CB Richard Ellis Research Grant
	Funding Amount: \$138,942 (100%)
2013-2015	PI for sub-award: Assessment of Economic Vulnerability and Investment Strategies for
	Coastal Communities (PI: Griffis, NYU Tandon)
	Sponsor: New York State Office of Storm Recovery  Funding Amount: Sub-envord, \$100,648 (1009)
2013-2015	Funding Amount: <b>Sub-award</b> , \$100,648 (100%) <b>Investigator</b> : Urban Science and Informatics Research Planning Grant (PI: Koonin,
2013-2013	NYU CUSP)
	Sponsor: Alfred P. Sloan Foundation
	Funding Amount: \$200,000 (10%)
2013-2014	PI: Sustainability Research Grant
	Sponsor: New York University
	Funding Amount: \$16,500 (100%)
2012-2013	PI: University Research Challenge Fund
	Sponsor: New York University
2012 2012	Funding Amount: \$12,000 (100%)
2012-2013	PI: Energy Performance, Asset Value, and Risk Exposure
	Sponsor: Real Estate Research Institute
2012 2012	Funding Amount: \$12,000 (100%)  PL: Passagrah Grant Sustainability Took Force
2012-2013	PI: Research Grant, Sustainability Task Force Sponsor: New York University
	Funding Amount: \$11,500 (100%)
2011-2013	PI: Data, Sustainability, and Urban Property Markets
2011 2013	Sponsor: Royal Institution of Chartered Surveyors
	Funding Amount: \$30,000 (100%)
2011-2013	PI: Global GHG Emissions, Climate Change, and the Buildings Sector
	Sponsor: United Nations Environment Programme
	Funding Amount: \$60,000, including in-kind (100%)

2011-2012 **PI**: Research Grant, Office of Sustainability

Sponsor: **New York University** Funding Amount: **\$9,500 (100%)** 

2010-2012 **Co-PI**: NYC Urban Technology Innovation Center (PI: Becker, NYU Tandon)

Sponsor: New York City Economic Development Corporation

Funding Amount: \$250,000; joint with City University of New York and Columbia

University (10%)

2009-2010 **PI**: Research Grant, Sustainability Task Force

Sponsor: **New York University** Funding Amount: **\$26,000 (100%)** 

2008-2010 **PI**: Effects of Inclusionary Zoning on Neighborhood Racial and Economic Integration

Sponsor: U.S. Department of Housing and Urban Development

Funding Amount: \$25,000 (100%)

### CURRICULUM LEADERSHIP & PROGRAM DEVELOPMENT

# Center for Urban Science and Progress

MS in Applied Urban Science and Informatics – Approved 2012. Launched Fall 2013. Designed, developed, and launched the first inter-disciplinary program in urban informatics. Created curriculum and led the University and New York State approval processes. Organized and chaired faculty committee representing eight (8) schools/departments at NYU including Courant Mathematical Institute, the Wagner School of Public Service, and the Tandon School of Engineering. Led multi-stakeholder program and curriculum reviewing that involved the City University of New York, Carnegie Mellon University, University of Warwick, and University of Toronto; industry partners including IBM, Cisco, ARUP, IDEO; U.S. Department of Energy National Laboratories; and New York City agencies, including the Mayor's Office of Data Analytics. Expanded the program from 23 students in the first year to 88 students in the fourth year.

MS in Urban Policy Analytics, NYU Center for Urban Science and Progress and NYU Wagner School of Public Service – Approved 2016. To be launched Fall 2019. Led the creation of a joint program between the Center for Urban Science and Progress and the Wagner School of Public Service in urban analytics for policy and planning. Curriculum designed to integrate data science and policy-making, with an emphasis on applications in public health, housing, sustainability, and city operations. Co-chaired curriculum committee with Ingrid Ellen and Mitchell Moss from NYU Wagner.

Advanced Certificate in Urban Informatics, NYU Center for Urban Science and Progress – Approved. 2012. Launched Fall 2013. Led the development of the Advanced Certificate program for post-master's students.

Executive Education Programs in Urban Analytics, NYU Center for Urban Science and Progress. Launched Fall 2013. Led the creation of Executive Education curricula for professionals from industry and government agencies to understand the application of data analytics to urban management, policy, and planning.

Department of Civil and Urban Engineering, Tandon School of Engineering

PhD in Urban Infrastructure Systems, Department of Civil and Urban Engineering and NYU Center for Urban Science and Progress. Co-led the proposal (currently in the approval process) with Professor Ilan Juran to create a PhD in Urban Infrastructure Systems program in the Department of Civil and Urban Engineering, in collaboration with the Center for Urban Science and Progress. The PhD is designed for students with engineering, science, computing, and quantitative social science backgrounds to study cities from a data-driven systems analysis perspective.

Undergraduate Minor in Urban & Infrastructure Informatics in the B.S. in Civil Engineering Program, Department of Civil and Urban Engineering. Developed University-wide undergraduate minor in urban informatics.

Concentration in Urban Informatics, MS in Urban Infrastructure Systems, Department of Civil and Urban Engineering. Created the Urban Informatics concentration at the Department of Civil and Urban Engineering within the existing MS program. The concentration brings data science and computational approaches to challenges of urban infrastructure management, planning, and investment.

### Schack Institute of Real Estate

MS in Real Estate Development, NYU Schack Institute of Real Estate – Approved Spring 2010. Launched Fall 2010. Co-chaired the committee that designed and launched a new MS program focusing on the technical, financial, regulatory, and design aspects of large-scale urban development. The program brings together students with backgrounds in finance, economics, law, public policy, planning, and engineering to the study of urban development processes.

Concentration in Sustainable Development, MS in Real Estate, NYU Schack Institute of Real Estate. Launched Fall 2010. As part of the Center for the Sustainable Built Environment, designed and launched a concentration focusing on green building design, economics, and policy, emphasizing data-driven approaches to urban sustainability.

#### **TEACHING**

(\*denotes new courses that I created)

### New York University

# Center for Urban Science and Progress

Urban Informatics for Smart, Sustainable Cities\*

Civic Analytics and Urban Intelligence\*

Urban Information and Community Technology for City Operations\*

Foundations of Urban Science (team taught with Professors Batty, West, Lobo, and Bettencourt)\* Urban Science Intensive I: Applied Methods in Informatics\*

International Programs\*

- London, UK, Data Intensive Program, in partnership with University of Warwick
- Singapore, Global Smart Cities Intensive, in partnership with the Singapore Land Authority, Singapore Infocomm Development Authority, ARUP, and ETH-Zurich

### Schack Institute of Real Estate

Entrepreneurship and Innovation in Real Estate and Development\*

Sustainable Development Thesis Capstone\*

Green Building and Sustainable Development\*

The Development Process

Land Use and Environment Regulation\*

International Real Estate Development, offered in Berlin, Germany in partnership with TU Berlin\*

### **ADVISEMENT**

### **Post-doctoral Associates**

1. Martin Traunmueller, PhD in Computer Science, University College London (2016-2017; currently Research Scientist at AIT – Austrian Institute of Technology in the Sustainable Cities and Buildings Unit)

- 2. Santonu Goswami, PhD in Environmental Science & Engineering, University of Texas El Paso (2015-2016; currently Scientist-SE, National Remote Sensing Center, Indian Space Research Organization)
- 3. Daniel Marasco, PhD in Civil Engineering, Columbia University (2014-2015; currently AAAS Science & Technology Policy Big Data Fellow)
- 4. Rishee K. Jain, PhD in Civil Engineering, Columbia University (2013-2014; currently Assistant Professor and NSF SEES Fellow at Stanford University; I serve as the faculty mentor of the NSF SEES award)

### PhD Students Graduated - as Advisor

- 1. Awais Malik (2014-2018), *Civil Engineering, Urban Informatics*; Joint between Department of Civil and Urban Engineering and CUSP, New York University
- 2. Nicholas Johnson (2015-2018), *Computer Science*; Joint between University of Warwick Department of Computer Science and CUSP, New York University

### PhD Students Graduated – as Committee Member/Reader

1. Frank DarConte (2013-2017), *Construction Management Analytics*, Department of Civil and Urban Engineering, NYU Tandon School of Engineering

### PhD Candidates - as Advisor

- 1. Sokratis Papadopoulos (2016-), Building Informatics; Joint between Department of Civil and Urban Engineering and CUSP, New York University
- 2. Yuan Lai (2016-), Urban Informatics; Joint between Department of Civil and Urban Engineering and CUSP, New York University
- 3. Boyeong Hong (2017-), Urban Informatics, Joint between Department of Civil and Urban Engineering and CUSP, New York University

### **Research Scientists**

- 1. Bartosz Bonczak (2015-)
- 2. Boyeong Hong (2016-2017)

### **Visiting Researchers and Students**

- 1. Lina Bjerke, Summer 2018, Jönköping International Business School, Sweden.
- 2. Dave Leather, Summer 2018, PhD Candidate, Economics, UNC Chapel Hill

### Master's Students - Graduate Research Assistants Funded and Supervised

- 1. Cyrus Blankinship, CUSP, 2018
- 2. Zhongheng Li, Computer Science, 2018
- 3. Emily Hansen, CUSP, 2017-2018
- 4. Jack Lundquist, CUSP, 2017-2018
- 5. Unisse Chua, CUSP, 2017-2018
- 6. Anastasiya Shegay, CUSP, 2016-2017
- 7. Ekaterina Levitskaya, CUSP, 2016-2017
- 8. Tashay Green, CUSP, 2016-2017
- 9. Kristin Korsberg, CUSP, 2016-2017
- 10. Geoff Perrin, CUSP, 2016-2017
- 11. Xinshi Zheng, CUSP, 2016-2017
- 12. Ian Wright, CUSP 2016-2017
- 13. Ian Stuart, CUSP, 2016-2017
- 14. Eren Con, CUSP, 2016
- 15. Philipp Kats, CUSP, 2016

- 16. Max Feinglass, CUSP, 2015-2016
- 17. Adhlere Coffey, CUSP, 2015-2016
- 18. Arno Amabile, CUSP, 2015-2016
- 19. Diego Garzon, CUSP, 2015
- 20. Eduardo Franco, CUSP, 2014-2015
- 21. Anjali Mehta, CUSP, 2014-2015
- 22. Christopher Tull, CUSP, 2014-2015
- 23. David Marulli, CUSP, 2014-2015
- 24. Patrick Atwater, CUSP, 2014-2015
- 25. Maha Yaqub, CUSP, 2014-2015
- 26. William Vidal, NYU Wagner, 2013-2015
- 27. Hassan Mohanna, CUSP, 2013-2014
- 28. Schuyler Poukish, CUSP, 2013-2014

# Master's Students - Research Theses and Capstone Team Projects Supervised

- 1. Sebastian Bana, Spring 2017, "Data Management for Hyperlocal Urban Sensing Networks".
- 2. Connor Chen, Matt Sloane, Alexis Soto-Colorado, and Adriano Yoshino, Spring-Summer 2017, *Using Data Science to Improve First Responder Response Times* 
  - Sponsor: City of New Orleans, Office of Performance and Accountability
- 3. Xueqi Huang, Kristi Korsberg, Dara Perl, and Avikal Somvanshi, Spring-Summer 2017, *Predictive Analytics for Homeless Shelter Outcomes* 
  - Sponsor: Women-In-Need Homeless Shelter Network
- 4. Trang Dam, Aaron D'Souza, Benjamin Miller, Zhaohong Niu, and Chunqing Xu, Spring-Summer 2017, *Understanding Urban Mobility Patterns Using WiFi Data* 
  - Sponsor: Alliance for Downtown New York
- 5. Xianbo Gao, Enrique Sanz Gonzalez, Victor Sette Gripp, and Peng Jia, Spring-Summer 2017, *The Energy Snapshot: Energy Efficiency Behavior Change Through Information Disclosure*Sponsor: **NYC Mayor's Office of Sustainability**
- 6. Alejandro Porcel, Tengfei Zhenga, Maria Ortiz, Jonathan Grundy, Eren Con, and Clayton Hunter, Summer 2016, *Urban Sensing in Low-Income Communities*Sponsor: **Red Hook Initiative**
- 7. Daniel Starobin, Spring 2016, Developing a Block Face-Aggregated Residential Solid Waste Generation Model
  - Sponsor: New York City Department of Sanitation
- 8. Maha Yaqub, Christopher Tull, and Rongqi Sun, Summer 2015, *Data-Driven Modeling of Urban Energy Use for Sustainability Planning* 
  - Sponsor: New York City Mayor's Office of Sustainability
- 9. Richard Dunks, Summer 2014, Data Integration of Sensor and Administrative Records and Visualization of Water Street
  - Sponsors: New York City Economic Development Corporation, Alliance for Downtown NY
- 10. Amir Beshay, Winnie Kaaria, and Kathrine Elliott, Summer 2014, Evaluating the Estimation and Prediction Accuracy of Environmental Impact Statements
  - Sponsors: New York City Mayor's Office of Environmental Conservation and New York City Department of Design and Construction
- 11. Jane Adams, Haozhe Wang, Ling Zhou, and Miguel Castro, Summer 2014, *Predicting the Adoption of Residential Energy Retrofits through Energy Audits* 
  - Sponsor: New York State Energy Research and Development Authority (NYSERDA)
- 12. Hassan Mohanna, Jeongki Lim, and Schuyler Poukish, Summer 2014, *Mobility and Behavior in Urban Environments Using Multiple Sensing Modalities* 
  - Sponsors: Related Companies, Intersection, and Cisco Systems, Inc.

# **Undergraduate Research Students Supervised**

- 1. Raka Day, NYU Tandon (Sustainable Urban Environments), Summer 2017
- 2. Pyay Aung San, NYU Tandon (Computer Science), Summer 2017
- 3. Ryan Sims, Northern Illinois University (Energy and Environmental Engineering), Summer 2017

# CONFERENCES AND SYMPOSIA ORGANIZED

2018-2019	<b>Technical Program Committee</b> , Science of Smart City Operations and Platform Engineering (SCOPE), 4 <sup>th</sup> Annual Conference, NIST Global Cities Team Challenge and
	Cyber-Physical Systems Week, Montreal, Canada
2018	Co-Chair, Next Generation Building Efficiency Policies, NYU School of Law, New
	York, NY
2018	<b>Technical Committee</b> , UNC Kenan-Flagler IPC-CREDA Real Estate Research Symposium, Chapel Hill, NC
2018	Scientific Committee, Buildings, Cities, and Performance, 3 <sup>rd</sup> International Graduate School Symposium of the PhD Program at the Illinois Institute of Technology College of Architecture, Chicago, IL
2018	Chair, "Big Ideas" Session, Association of Collegiate Schools of Planning, Annual Conference, Buffalo, NY
2018	Panel Chair, "Smart Cities," Kavli Futures Symposium: Sensing the City, New York, NY
2018	<b>Technical Program Committee</b> , Science of Smart City Operations and Platform Engineering (SCOPE), 3 <sup>rd</sup> Annual Conference, NIST Global Cities Team Challenge and Cyber-Physical Systems Week, Porto, Portugal
2017	Panel Chair, "Urban Computing and the Quantified Community," National Planning Conference, American Planning Association, New York, NY
2017	<b>Technical Program Committee</b> , Science of Smart City Operations and Platform Engineering (SCOPE), 2 <sup>nd</sup> Annual Conference, NIST Global Cities Team Challenge and Cyber-Physical Systems Week, Pittsburgh, PA
2016	International Scientific Committee, World Sustainable Built Environment Conference,
2010	Hong Kong
2016	<b>Technical Program Committee</b> , IEEE Frontiers in Education Research 2016
2010	Conference, Pittsburgh, PA
2016	Panel Chair, "Smart Cities," NYU Tandon School of Engineering
2016	Technical Program Committee, Science of Smart City Operations and Platform
	Engineering (SCOPE) 2016 Conference, Vienna, Austria
2015	Technical Program Committee, ACM BuildSys Conference 2015, Seoul, South Kora
2015	Co-Chair, "Urban Resiliency: A Roadmap for Planning, Policy, and Design," New York
	Academy of Sciences Symposium
2014	Chair, "Taking Stock and Moving Forward: Ideas for the Next Generation of Sustainable Real Estate," Annual Conference, NYU Center for the Sustainable Built Environment, New York, NY
2014	Panel Chair, "Urban Sustainability and Big Data," The Energy Wise City Conference, NYU Center for Global Affairs, New York, NY
2013	<b>Technical Program Committee,</b> Urban Systems Collaborative 3 <sup>rd</sup> Annual Symposium, Imperial College London
2013	Chair, Quantified Community Research Workshop, NYU Center for Urban Science and Progress, New York, NY
2013	Chair, Building Informatics Research Workshop, NYU Center for Urban Science and Progress, New York, NY

2013 Chair, "Big Data and Disruptive Innovation: Is the Real Estate Industry Next?" Conference, Annual Conference, NYU Center for the Sustainable Built Environment, New York, NY 2013 Organizing Committee, "From the Outside In: Sustainable Futures for Global Cities and Suburbs," Hofstra University, Hempstead, NY Track Chair, "Urban Big Data Analytics", AERTC Advanced Energy Conference 2013 2012 Organizing Committee, Implications of a Data-Driven Built Environment Symposium, New York Academy of Sciences, New York, NY Chair, "Energy Performance, Risk, and Real Estate Capital Markets: Searching for 2012 Common Metrics," Annual Conference, NYU Center for the Sustainable Built Environment, New York, NY **Co-Chair**, Urban Systems Collaborative 2<sup>nd</sup> Annual Symposium, UC Berkeley, 2012 Berkeley, CA Chair, "Building the Smart City: Removing Barriers, Fostering Innovation," Annual 2011 Conference, NYU Center for the Sustainable Built Environment, New York, NY Co-Chair, Urban Systems Collaborative 1<sup>st</sup> Annual Symposium, New York University, 2011 New York, NY Chair, "The Real Estate Industry's Perspective on Green Building Technologies," NYC 2011 Urban Technology Innovation Center Symposium, New York, NY

### PRESENTATIONS AND INVITED RESEARCH TALKS

### **Peer-reviewed Conference Presentations and Abstracts**

- 1. Kontokosta, Constantine E., Martin Traunmueller, Nicholas Johnson, and Bartosz Bonczak. 2018. "Mobility and Human Trajectories Using Large-Scale Geospatial Data," *Association of Public Policy Analysis and Management (APPAM) Annual Research Conference 2018*, Washington, DC.
- 2. **Kontokosta, Constantine E.**, Danielle Spiegel-Feld, and <u>Sokratis Papadopoulos</u>. 2018. "Do Mandatory Energy Audits Reduce Energy Use?" *Behavior, Energy, and Climate Change Annual Conference*, Washington, DC.
- 3. Freeman, Lance and **Constantine E. Kontokosta**. 2018. "Using Big Data and Machine Learning to Understand Neighborhood Dynamics," *Association of Collegiate School of Planning (ACSP) Annual Conference 2018*, Buffalo, NY.
- 4. **Kontokosta, Constantine E.**, <u>Boyeong Hong</u>, and Daniel Starobin. 2017. "Data-Driven Policy Strategies for Zero Waste Sustainability Goals," *Association of Public Policy Analysis and Management (APPAM) Annual Research Conference 2017*, Chicago, IL.
- 5. <u>Boyeong Hong, Nicholas Johnson, Geoff Perrin,</u> Daniel Starobin, and **Constantine E. Kontokosta**. 2017. "Using Machine Learning to Predict Building Level Waste Generation and Recycling Rates," *Institute for Operations Research and the Management Sciences (INFORMS) Annual Conference* 2017, Houston, TX.
- 6. **Kontokosta, Constantine E.** and <u>Nicholas Johnson</u>. 2017. "Understanding Neighborhood Dynamics Through Low-cost In-situ Sensing of the Urban Troposphere," *American Meteorological Society's 13<sup>th</sup> Symposium of the Urban Environment*.
- 7. Sobolevsky, Stanislav, Sergey Malinchik, <u>Philipp Kats</u>, Cheng Qian, Satish Ukkusuri, Kaan Ozbay, Constantine E. Kontokosta and Mark Hoffman. 2017. "Networks of Urban Vulnerability," *Conference on Complex Systems*, Cancun, Mexico.

- 8. **Kontokosta, Constantine E.** 2017. "The Quantified Community," *American Planning Association*, National Planning Conference, New York, NY.
- 9. **Kontokosta, Constantine E.** and <u>Nicholas Johnson</u>. 2016. "Using WiFi Data for Localized, Real-Time Population Estimates," *Association for Public Policy Analysis and Management (APPAM)*, Annual Research Conference, Washington, DC.
- 10. **Kontokosta, Constantine E.** 2015. "Do Energy Disclosure Policies Drive Behavior Change?" *Association for Public Policy Analysis and Management (APPAM)*, Annual Conference, Miami, FL.
- 11. **Kontokosta, Constantine E.** 2015. "Modeling the Building and Neighborhood Dynamics of Energy and Water Use in Multi-Family Housing," *American Real Estate and Urban Economics Association (AREUEA)*, Annual International Conference, Washington DC.
- 12. **Kontokosta, Constantine E.** 2015. "Real Estate Informatics: Implications for Investment and Valuation," Homer Hoyt Institute, *Weimar School of Advanced Studies*, West Palm Beach, FL.
- 13. **Kontokosta, Constantine E.** 2014. "Applying Behavioral Strategies to Energy Decisions," *Proceedings of the American Academy of Arts and Science/New York State Energy Research and Development Authority Joint Symposium*, PACE University, NY.
- 14. **Kontokosta, Constantine E.** 2014. "The Smart City and Its Discontents: Big Data, Urban Informatics, and a Science of Cities," *Association of Collegiate Schools of Planning (ACSP)*, Annual Conference, Philadelphia, PA.
- 15. **Kontokosta, Constantine E.** 2014. "Does Energy Disclosure Drive Efficiency?" *GreenBuild Annual Conference* (peer-reviewed research track), Philadelphia, PA.
- 16. **Kontokosta, Constantine E.** 2014. "Urban Informatics and the Quantified Community," *Urban Systems Workshop*, Carnegie Mellon University, PA.
- 17. **Kontokosta, Constantine E.** 2013. "How Far Can 'Big Data' Take Us to Understanding Cities," *Santa Fe Institute*, Santa Fe, NM.
- 18. **Kontokosta, Constantine E.** 2013. "Evaluating New York City's Energy Benchmarking Law," *GreenBuild Annual Conference* (peer-reviewed research track), Philadelphia, PA.
- 19. **Kontokosta, Constantine E.** 2013. "Investment Performance and Energy Disclosure," *NCREIF Research Leadership Summit*, Chicago, IL.
- 20. **Kontokosta, Constantine E.** 2013. "Urban Data Analytics," *Advanced Energy Conference*, Advanced Energy Research and Technology Center, New York, NY.
- 21. **Kontokosta, Constantine E.** 2013. "Exploring the Link between Building Energy Performance and Investment Performance: Evidence from New York City's Local Law 84 Data," *American Real Estate and Urban Economics Association (AREUEA)*, Annual Meeting, San Diego, CA.
- 22. **Kontokosta, Constantine E.** 2012. "Building the Smart City: Governance of Complex Urban Systems," *American Association of Geographers (AAG)*, Annual Conference, New York, NY.

- 23. **Kontokosta, Constantine E.** 2011. "Developing Country GHG Baseline Reports," *United Nations Environment Progammme Symposium*, Philadelphia, PA.
- 24. **Kontokosta, Constantine E.** 2011. "The Spatial Diffusion of Green Building Policies," *Strengthening the Green Foundation Conference, Federal Reserve Bank of Atlanta / Tulane University*, New Orleans, LA.
- 25. **Kontokosta, Constantine E.** 2011. "The City as Market-Maker: The Diffusion of Green Building Policies," *European Real Estate Society (ERES)*, Annual Conference, Eindhoven, The Netherlands.
- 26. **Kontokosta, Constantine E.** 2011. "Taking the LEED? Analyzing Spatial Variations in Market Penetration Rates of Eco-Labeled Properties," *American Real Estate Society (ARES)*, Annual Conference, Seattle, WA.
- 27. **Kontokosta, Constantine E.** 2010. "Spatial Patterns and Neighborhood Effects of Inclusionary Housing" *Association of Collegiate Schools of Planning (ACSP)*, Annual Conference, Minneapolis, MN.
- 28. **Kontokosta, Constantine E.** 2010. "The Impact of the Olympics on Emerging Economies: Opportunities for Capacity-Building through Urban Infrastructure and Development," Latin *American Real Estate Society (ARES)*, Annual Conference (invited), Sao Paulo, Brazil.
- 29. **Kontokosta, Constantine E.**, Franz Fuerst, Patrick McAllister, and Tom Geurts. 2010. "Locational Determinants of Green Commercial Buildings," *European Real Estate Society (ERES)*, Annual Conference, Milan, Italy.
- 30. **Kontokosta, Constantine E.** 2010. "Setting the PACE: Financial Mechanisms for Building Energy Retrofits," *American Real Estate Society (ARES)*, Annual Conference, Naples, FL.
- 31. **Kontokosta, Constantine E.** 2009. "Neighborhood Revitalization: Quantitative Indicators and Predictive Model," *Association of Collegiate Schools of Planning (ACSP)*, Annual Conference, Crystal City, VA.
- 32. **Kontokosta, Constantine E.** 2009. "The Role of Regional Governance in the Production and Distribution of Affordable Housing," *The Diverse Suburb Conference: History, Politics, and Prospects,* Hofstra University, Hempstead, NY.
- 33. **Kontokosta, Constantine E.** 2009. "The Impact of the Olympic Games on Foreign Direct Investment in Real Estate," *European Real Estate Society (ERES)*, Annual Conference, Stockholm, Sweden.
- 34. **Kontokosta, Constantine E.** 2009. "The Interaction Effects of Inclusionary Zoning and Land Use Regulations," *American Real Estate Society (ARES)*, Annual Conference, Monterrey, CA.
- 35. **Kontokosta, Constantine E.** 2009. "Inclusionary Zoning and Neighborhood Racial and Economic Transition," *Association of Collegiate Schools of Planning-Association of European Schools of Planning (ACSP-AESOP)*, Joint Annual Conference, Chicago, IL.

- 36. **Kontokosta, Constantine E.** and Justin P. Steil. 2008. "Moving Out, Moving Up or Not Moving at All? Gentrification, Mobility and Income for Poor New Yorkers," *Association of American Geographers (AAG)*, Annual Conference, Boston, MA.
- 37. **Kontokosta, Constantine E.** 2007. "Inclusionary Zoning and Affordable Housing: A Private Solution to a Public Problem?" *Association of Collegiate Schools of Planning (ACSP)*, Annual Conference, Fort Worth, TX.
- 38. **Kontokosta, Constantine E.** 2006. "Impacts of the Olympic Games on House Prices," *American Real Estate and Urban Economics Association (AREUEA)*, Annual International Conference, Vancouver, Canada.

# **Keynotes & Invited Presentations**

- 39. Pension Real Estate Association, New York, NY, 2018
- 40. United Nations Youth Assembly, Smart Cities; Technology for Development, New York, NY, 2018
- 41. Skidmore, Owings, and Merrill, Metropolis Think Tank, New York, NY, 2017
- 42. Ernst & Young, Annual Meeting, New York, NY, 2017
- 43. Kohn Pederson Fox, Making Cities Smarter: Using Data to Shape NYC, New York, NY, 2017
- 44. Urban Design Forum, Forefront Fellows Program, Urban Experience Design, New York, NY 2017
- 45. CoreNet Global, Executive Leadership Council and Summit, Philadelphia, PA, 2016
- 46. Hellenic American Chamber of Commerce, Distinguished Lecture Series, New York, NY, 2016
- 47. Bisnow, Future of Real Estate Conference, New York, NY, 2016
- 48. UN-HABITAT III, Prague, Czech Republic, 2016 (invited)
- 49. CoreNet Global, Real Estate Technology Symposium, New York, NY, 2016
- 50. Thornton Tomasetti, CORE Studio, Architecture, Engineering, and Construction Technology Symposium, New York, NY, 2015
- 51. Academy of Arts and Sciences, Philanthropic Leadership Symposium, Washington, DC, 2015
- 52. "Big Data and New Measures of Building Performance," Urban Land Institute Sustainability Workshop, New York, NY, 2014
- 53. "America's Urban Future," VERGE Salon: Next-Gen Buildings and Cities, New York, NY, 2014
- 54. "The Economics of Green Buildings," Appraisal Institute Annual Conference, New York, NY, 2014
- 55. "Data Analytics for Urban Energy Dynamics," Energy Benchmarking 2.0 Symposium, City of Seattle and the Institute for Market Transformation, Washington, DC, 2014
- 56. ARUP, Big Data Symposium, New York, NY, 2013
- 57. NYC DataWeek, New York, NY, 2013
- 58. "Data in the Global Metropolis: How the data age will shape the future of city building," CityAge: The Global Metropolis, New York, NY, 2013
- 59. American Society of Engineering Education, Engineering Deans Institute, New York, NY, 2013
- 60. "Individual Behavior and Collective Action: Achieving Long-Term Sustainability through Better Buildings," Garrison Institute, Climate, Buildings, and Behavior Symposium, Garrison, NY, 2012
- 61. GoGreen Conference, New York, NY, 2012
- 62. "Data-Driven City Operations for Sustainability," Cisco China City Leaders Program, New York, NY, 2012
- 63. Intelligent Infrastructure, Clean Energy Connections: SolarOne, NYC ACRE, and Urban Future Lab, New York, NY, 2012
- 64. "The Emergence of Urban Science," Riverdale Country School, Bronx, NY, 2012
- 65. "Social Equity and Low-Income Housing Policy," Long Island Housing Summit, Brookhaven National Labs, Brookhaven, NY, 2012
- 66. Hofstra University, Breslin Center Annual Conference, Hempstead, NY, 2011
- 67. Architecture for Humanity, Fall Humanitarian Design Conference, New York, NY, 2011

- 68. The New Downtown Conference, New York, NY, 2011
- 69. Council of Urban Professionals, Distinguished Leadership Series, New York, NY, 2011
- 70. UN Global Forum on Human Settlements, New York, NY, 2011
- 71. CoreNet Global, Annual Sustainability Summit, New York, NY, 2011
- 72. United Nations Environment Programme, Sustainable Buildings and Climate Initiative Symposium, Shanghai, China, 2010
- 73. Molloy College, Clean Energy Task Force, Farmingdale, NY, 2010
- 74. Long Island Association, Board of Directors Annual Meeting, Melville, NY, 2010
- 75. Long Island Association, Annual Conference, Melville, NY, 2010

### **Invited Research Talks and Seminars**

- 76. Council for Tall Buildings and Urban Habitat, New York, NY, 2018
- 77. NYU Stern School of Business, School-wide Faculty Research Seminar, New York, NY, 2018
- 78. Analytics & Data Science Meetup hosted by Dataiku, New York NY, 2018
- 79. Harvard Business School, Guest Lecture in Mitchell Weiss' Public Innovation course, Cambridge, MA, 2017
- 80. U.S. Department of Transportation, C2SMART Center, New York, NY, 2017
- 81. University of North Carolina at Chapel Hill, Kenan-Flagler Business School, Chapel Hill, NC, 2017
- 82. National Academy of Sciences, Committee on Measuring Community Resilience, New York, NY, 2017
- 83. U.S. Environmental Protection Agency, Smart City Air Challenge (webinar), Washington, DC, 2017
- 84. NYU-Columbia Chilean Public Policy Association, Annual Conference, New York, NY 2017
- 85. United Nations International Telecommunications Union, Focus Group on Data Processing and Management to support IoT and Smart Cities & Communities, Geneva, Switzerland, 2017 (via telecon)
- 86. NYU Stern School of Business, Center for Real Estate Finance Research, Seminar Series, New York, NY, 2017
- 87. Advanced Computing Roundtable, Council on Competitiveness, New York, NY, 2017
- 88. New York Academy of Medicine, New York, NY, 2017
- 89. Internet of Risky Things Symposium, New York University and AIG, New York, NY, 2017
- 90. New York University, Stern School of Business, Center for Real Estate Finance, Annual Spring Symposium, New York, NY, 2017
- 91. Harvard University, Center for Public Leadership, Boston, MA, 2017
- 92. National Academy of Sciences, Committee on Applied and Theoretical Statistics, Washington, DC, 2016
- 93. Columbia University, Urban China Forum, New York, NY, 2016
- 94. University of North Carolina at Chapel Hill, Kenan-Flagler Business School, Chapel Hill, NC, 2016
- 95. New York University, Furman Center for Real Estate and Urban Policy, New York, NY, 2016
- 96. American Institute of Architects (AIA-NY Chapter), New York, NY, 2016
- 97. Central European University Business School, Visiting Delegation, New York, NY, 2016
- 98. New York City Department of Parks and Recreation, Parks without Borders Summit, New York, NY, 2016
- 99. New York City Economic Development Corporation, New York, NY, 2016
- 100. Columbia University, Graduate School of Architecture, Planning, and Preservation, New York, NY, 2016
- 101. Massachusetts Institute of Technology, Urban Physics Workshop, Cambridge, MA, 2016
- 102. New York University, Tandon School of Engineering, Dean's Research Seminar, New York, NY, 2016
- 103. New York Association for Energy Economics, New York, NY, 2016

- Columbia University, Sabin Center, and Sallan Foundation, Benchmarking Symposium, New York, NY, 2015
- 105. New York University, Stern School of Business, and Bloomberg LP Real Estate and Infrastructure Symposium, New York, NY, 2015
- 106. U.S. Department of Energy and Pacific Northwest National Lab, Washington, DC, 2015
- 107. Lviv Business School, Lviv, Ukraine, 2015
- 108. NIST-ASCE-ASME Workshop on Economics of Community Disaster Resilience, Washington, DC, 2015
- 109. Harvard University, Graduate School of Design, Boston, MA, 2014
- 110. EcoDistricts, Annual Summit, Washington, DC, 2014
- 111. ETH-Zurich, Future Resilient Cities Symposium, New York, NY, 2014
- 112. U.S. Department of Energy, Better Buildings Summit, Washington, DC, 2014
- 113. Sloan and MacArthur Foundations, Urban Science Convening, New York, NY, 2014
- 114. American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), Winter Meeting, New York, NY, 2014
- 115. New York University, Center for Global Affairs, The Measured City Conference, New York, NY, 2013
- 116. Columbia University, National Science Foundation IGERT Doctoral Seminar, New York, NY, 2013
- 117. City University of New York (CUNY), New York, NY, 2013
- 118. ONE Lab, Summer Design Program, New York, NY, 2013
- 119. IBM, Smarter Cities Technical Community Seminar, New York, NY, 2013
- 120. New York University, Institute for Public Knowledge, New York, NY, 2013
- 121. New York University, Stern School of Business, Center for Real Estate Finance Research Symposium, New York, NY, 2013
- 122. New York University, Wagner School of Public Service, New York, NY, 2013
- 123. The Brookings Institution, Washington, DC, 2013
- 124. American-Scottish Foundation, Energy Forum, New York, NY, 2013
- 125. New York University, Wallerstein Collaborative for Urban Environmental Education, New York, NY, 2013
- 126. The New School, Center for New York City Affairs, New York, NY, 2013
- 127. UC-Berkeley, Urban Systems Collaborative Annual Symposium, San Francisco, CA, 2012
- 128. Urban Systems Collaborative, Seminar Series, New York, NY, 2012
- 129. New York University, Wallerstein Collaborative for Urban Environmental Education, New York, NY, 2012
- 130. Abu Dhabi Urban Planning Council, New York University, New York, NY, 2012
- 131. Istanbul Metropolitan Municipality, New York University, New York, NY, 2012
- 132. New York University, Schack Institute of Real Estate, Sustainability Speaker Series, New York, NY, 2012
- 133. New York University, Stern School of Business, Urbanization Project Seminar Series, New York, NY, 2012
- 134. New York Academy of Sciences, Condensed Matter Physics Meeting, New York, NY, 2012
- 135. Chinese Ministry of Water Resources, New York, NY, 2012
- 136. Royal Institution of Chartered Surveyors, Annual Summit, Miami, FL, 2012
- 137. IBM Research and Ireland IDA, Yorktown, NY, 2012
- 138. New York Academy of Sciences, Implications of a Data-Driven Built Environment Symposium, New York, NY, 2012
- 139. University of Amsterdam, Amsterdam, The Netherlands, 2012
- 140. Urban Systems Symposium, Chicago, IL, 2012
- 141. Clinton Global Initiative, Winter Meeting, New York, NY, 2012
- 142. New York University, Wagner School of Public Service, New York, NY, 2012

- 143. Urban Systems Collaborative, Annual Symposium, New York, NY, 2011
- 144. Ecole Hoteliere Lausanne and New York University, Tisch Center, New York, NY, 2011
- 145. U.S. Department of Energy, New York, NY, 2011
- 146. Clinton Global Initiative, New York, NY, 2011
- 147. New York City Urban Technology Innovation Center, New York, NY, 2011
- 148. Columbia University, Graduate School of Architecture, Planning, and Preservation, New York, NY, 2011
- 149. Advanced Energy Conference, Stonybrook University, New York, NY, 2010
- 150. New York Wastewater Infrastructure Summit, Hauppauge, NY, 2010
- 151. Suffolk County Planning Federation Conference, Brookhaven National Labs, NY, 2010
- 152. University of Amsterdam Exchange Program (at NYU), 2010
- 153. Columbia University, Graduate School of Architecture, Planning, and Preservation, New York, NY, 2010
- 154. New York University, Environmental Studies Program, New York, NY, 2010
- 155. New York University, Polytechnic Institute and NYC ACRE, New York, NY, 2010
- 156. New York University, Stern School of Business, New York, NY, 2010
- 157. New York University, Center for Advanced Digital Applications, New York, NY, 2010

### LEADERSHIP AND SERVICE

Boards, Adviso	ory Committees, and External Service
2018-	Member, Microsystems Exploratory Council (MEC), <b>DARPA</b>
2017-2019	Planning Committee, Workshop on the Frontiers of Big Data, Modeling, and Simulation
	in Urban Sustainability, Board of Mathematical Sciences and Analytics, National
	Academy of Sciences
2017-2018	Evaluation Committee, NYCx Urban Tech Challenge, NYC's Mayor's Office of the
	Chief Technology Officer
2017	Reviewer Panel, Directorate of Computer and Information Science and Engineering,
	National Science Foundation (invited)
2017	External Reviewer, Geography and Spatial Sciences Program, National Science
	Foundation
2017	Invited participant, Envisioning Future Cities Workshop, organized by UIC, UoM, and
	GeorgiaTech, National Science Foundation
2016-	Member, Commercial Real Estate Data Initiative, University of North Carolina –
	Kenan Flagler Business School
2016-2017	Member, Expert Advisory Group, Future Cities Catapult
2016-2017	Member, Data into Action Advisory Group, Building Energy Exchange
2016	Site Visit Review Team, Engineering Research Center (ERC), National Science
	Foundation
2016	Member, Local Law 87 Energy Audit Technical Working Group, NYC Mayor's Office
	of Sustainability
2016	External Reviewer, Exascale Computing Project, U.S. Department of Energy
2016	External Grant Reviewer, Army Research Office, U.S. Department of Defense
2016	External Grant Reviewer, PSC-CUNY Research Award Program, City University of
	New York (CUNY)
2015-	Member, Steering Committee, NSF Big Data Hub – Northeast Region, <b>National Science</b>
	Foundation
2015-	Editorial Board, Journal of Sustainable Real Estate
2015-2016	Member, Smart City Working Group, New York State Regional Economic
	<b>Development Council</b>

2015-	Member, Infrastructure Resilience Division, Risk and Resilience Measurements Committee, <b>American Society of Civil Engineers</b>
2014-2015	Member, Advisory Committee, Building Energy Data Initiative, Institute for Market
2014	<b>Transformation</b> Member, Advisory Committee, World to NYC Smart and Sustainable Cities Initiative,
2014	NYC Economic Development Corporation
2013-2014	Member, Advisory Board, 4 <sup>th</sup> Regional Plan, Regional Plan Association
2011-2014	Elected Board Member, Americas Board, Royal Institution of Chartered Surveyors
2011-2014	Elected Board Member, Americas Education and Standards Board, Royal Institution of Chartered Surveyors
2011-2014	Co-Founder/Core Team Member, Urban Systems Collaborative
2012-2013	Member, Leadership Committee, Climate, Mind, and Behavior Initiative, Garrison
	Institute
2012-2013	Appointed member, 80x50 Long-Term Sustainability Plan Task Force, <b>NYC Mayor's Office of Sustainability</b>
2012-2013	Juror, Green Existing Building Award, Urban Green Council
2012	Member, Green Building Discussion Group, New York Academy of Sciences
2011-2015	Clinton Global Initiative
	Invited participant, CGI, CGI Winter Meeting, CGI America
	Member, Scaling Sustainable Buildings Action Network
	Member, Built Environment Track
2011-2012	Technical Advisory Panel, Energy Disclosure Law Impact Study, Institute for Market
	Transformation,
2011-2012	Board of Advisors, Sustainable Buildings and Climate Initiative (Elected), United
	Nations Environment Programme (UNEP)
2011-2012	Appointed member, Advisory Committee on Local Law 87 Energy Audits, NYC
	Mayor's Office of Sustainability
2011-2012	Appointed member, Advisory/Selection Committee, Municipal Entrepreneurial Testing
2011	System (METS), New York City Council
2011	Juror, Annual Real Estate Transactions Award, Commercial Property Executive
2010 2012	Magazine  Magazine
2010-2012 2010-2012	Member, Clean Energy Leadership Task Force, Sustainability Institute, <b>Molloy College</b> Co-Founder/Executive Team, <b>NYC Urban Technology Innovation Center</b>
2010-2012	U.S. Department of Energy, Zero Energy Commercial Building Consortium
2009-2012	Member, Owners and Tenants Group
	Member, Finance and Incentives Group
2006-2011	Engineers without Borders International, New York Professional Chapter
2000 2011	Member, East Coast Technical Advisory Committee
	Member, Cambodia Project Team
2005-2012	Suffolk County Planning Commission, Hauppauge, NY (appointed)
	Vice Chair (elected)
	Chair, Suffolk County Housing Taskforce
	Co-Chair, Commercial Energy Efficiency Building Codes Taskforce
	Member, Energy Efficiency and Sustainable Development Taskforce
	Member, Subcommittee on Planning Commission Review Guidelines
	Member, Comprehensive Plan Subcommittee
	Member, Economic Development Subcommittee
2004-2005	Committee member, Hamlet Study Plan, Town of Southold, NY

# **University Service**

New Yo	ork l	Univ	ersitv
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2018-	Member, Exposome Research Initiative
2017-	Founding Member, Urban Research Working Group
2013-2015	Member, 370 Jay Street Project Team (Development of 460,000 sq.ft. CUSP space)
2012-2013	Member, Big Data and Data Science Academic Commission
2012-2013	Member, 1 Metrotech Center Project Team (Planning for 30,000 sq.ft. CUSP space)
2012-2013	Member, Media and Games Center Design Development Committee
2010-2013	Co-Chair, Green Building and Campus Planning Working Group
2008-	Faculty Advisor, NYU Sustainability Task Force
2008-2011	Member, Student Liaison Committee
2008-2010	Member, Faculty Research Grant Selection Committee

# New York University Center for Urban Science and Progress (CUSP)

2016-2017	Member, Urban Informatics Faculty Search Committee (One senior position)
2015-2017	Chair, MS in Urban Policy Analytics Curriculum Committee
2015-2016	Member, Urban Informatics Faculty Search Committee (Three senior positions)
2014-2017	Chair, Professor of Practice Search Committee (Two positions)
2013-2017	Co-Chair, CUSP Urban Informatics PhD Committee
2012-2018	Chair, Faculty Curriculum Committee
2010-	Member, Town + Gown Committee (NYC DDC)
2012-2013	Co-organizer, CUSP Partner Workshop

# New York University, Tandon School of Engineering, Department of Civil and Urban Engineering

2017-	Chair, Minor in Urban Informatics Curriculum Committee
2017-	Faculty Advisor, Vertically Integrated Projects (VIP) Research Program
2016-	Co-Chair, PhD in Urban Systems Curriculum Committee
2015-2017	Co-Chair, Urban Systems Engineering Program Committee
2014-2015	Member, Faculty Search Committee, CM/Environmental Engineering

# New York University Abu Dhabi

2015-2016	Member, Urban Systems & Informatics Faculty Search Committee
2011-2013	Member, Engineering Faculty Search Committee
2011-2012	Member, Urban Systems Curriculum Committee

# New York University, Schack Institute of Real Estate 2010-2014 Organizer/Faculty Advisor Student Technical Assistance Program

2010-2014	Organizer/Faculty Advisor, Student Technical Assistance Program
2010-2012	Chair/Founder, NYU-SBE Graduate Student Competition
2010-2012	Member, Subcommittee on Technology and Innovation in Construction
2010-2012	Member, Editorial Board, NYU Schack Institute Journal
2010-2011	Faculty Advisor, REISA Entrepreneurship Group
2009-2014	Chair/Founder, Sustainability Speaker Series
2009-2014	Faculty Advisor, SBE Student/Alumni Advisory Board
2009-2013	Member, Graduate Student Scholarship Selection Committee
2009-2011	Co-Chair, M.S. in Real Estate Development Curriculum Committee
2009-2011	Faculty Advisor, Student Real Estate Competition Team
2008-2014	Construction Management Program Advisory Board

### REFEREE

Energy Policy, Environment and Planning B: Urban Analytics and City Science, Urban Studies, Annals of the New York Academy of Sciences, Housing Policy Debate, Journal of Sustainable Real Estate, ACEEE Summer Study, Spatial Economic Analysis, Journal of Urbanism, Journal of Community Informatics, Journal of Urban Affairs, Emerald Group Publishing – Built Environment and Property Management Books, Journal of Urban Technology, Environment, Development, and Sustainability, Urban Science, Journal of Planning Education and Research, Computers, Environment, and Urban Systems, Sustainable Cities and Society, Landscape and Urban Planning, Energy and Buildings, Reliability Engineering and System Safety, ASCE Journal of Computing in Civil Engineering, Science of the Total Environment, International Journal of Disaster Risk Reduction, Environmental Science & Technology

### PRESS COVERAGE (ACADEMIC/RESEARCH ONLY)

- 1. Forbes, "What Investors Should Know About Public Transportation's Effect On Manhattan Real Estate Value" (Nov. 27, 2018)
- 2. Urban Land Magazine, "The Developing Power of Big Data" (Oct. 29, 2018)
- 3. Smart Cities Dive, "The Data-Driven City" (June 14, 2018)
- 4. Australian Broadcasting Corporation, "Big data is going to shape our future cities. Will it treat us all equally?" (Mar. 14, 2018)
- 5. *Metropolis Magazine*, "As Technology Reshapes Cities' Economies and Daily Life, We Risk Widening Inequality" (Feb. 8, 2018)
- 6. *New York Times*, "The Subway is Next Door. Should New Yorkers Pay Extra for That?" (Jan. 29. 2018)
- 7. *Curbed New York*, "Could a Manhattan 'Transit Maintenance District' Fund Subway Repairs?" (Nov. 20, 2017)
- 8. *Crain's New York*, "Landlords benefit from subways. Two NYU professors calculated how much that's worth" (Nov. 17, 2017)
- 9. *NYU Tandon News*, "Constantine Kontokosta is on the Frontlines of Using Data for Good in Cities" (Nov. 9, 2017)
- 10. *City of New York, Office of the Mayor*, "De Blasio Administration and Brownsville Community Leaders Announce NYCx Co-Lab Challenges in Brownsville" (Oct. 23, 2017)
- 11. *City of New York, Office of the Mayor*, "Mayor Announces Dramatic Drop in Energy Use and Carbon Emissions in Large Buildings Citywide" (Oct. 19, 2017)
- 12. amNY, "Greenhouse Gases Cut by 14% Under City Buildings Plan, Report Says" (Oct. 19, 2017)
- 13. Habitat Magazine, "City's Co-ops and Condos Cut Energy Use and Emissions" (Oct. 19, 2017)
- 14. *GovTech*, "NYU Center for Urban Science and Progress Tackles Bus Reliability, Harmful Landlord Practices, with Data" (Sept. 8, 2017)
- 15. *NYU Tandon News*, "Tandon Faculty and Researchers Discuss Urban Resiliency with The National Academies" (Aug. 17, 2017)
- 16. *Education Dive*, "Urban informatics offers partnership opportunities between institutions, cities" (Aug. 15, 2017)
- 17. *City of New York, Office of the Mayor*, "De Blasio Administration Announces Launch of New Smart City Technologies and Young Innovators Program in Brownsville" (July 7, 2017)
- 18. Fox 5 News (Primetime TV New York City News Program) (Mar. 20, 2017)
- 19. *Technical.ly Brooklyn*, "Why this NYU Tandon Prof is Mapping Out All of the Electricity Used in the City" (Mar. 31, 2017)
- 20. Washington Square News, "NYU Helps Open Neighborhood Innovation Labs" (Mar. 27, 2017)
- 21. Washington Square News, "Two Tandon Professors Win CAREER Awards" (Mar. 22, 2017)

- 22. *Brooklyn Daily Eagle*, "National Science Foundation recognizes 2 NYU Tandon professors for promising research in smart cities and smart transportation" (Mar. 16, 2017)
- 23. Forbes, Inc. "Smart Cities: The Solution to Our Urban Ills? (Mar. 1, 2017)
- 24. The Stack, "Monitoring New York Poverty with Urban IoT" (Sept. 29, 2016)
- 25. Energy Manager Today, "New York City Study Conclusion: Benchmarking Works" (Aug. 25, 2016)
- 26. Realtor.com, "Will the Olympics Rescue or Ruin Rio's Housing Market?" (Aug. 3, 2016)
- 27. *NPR*, "The Future of the Smart City" (June 23, 2016)
- 28. Toronto Star, "Our Data, Ourselves" (May 7, 2016)
- 29. The Economist, "How Cities Score," (Mar. 26, 2016)
- 30. Spacing Magazine, "Waiting for the Other Shoe to Drop on Inclusionary Zoning," (Mar. 21, 2016)
- 31. *Bisnow*, "Hudson Yards' Smart City Initiatives Could Provide Glimpse of NYC's Future," (Feb. 24, 2016)
- 32. *NYU News*, "At the Forefront of Urban Informatics, Constantine Kontokosta is Widely Recognized for his Pioneering Work," (Feb. 8, 2016)
- 33. Observer, "Data Shows the Way for New York's Greenhouse Gas Reductions," (Jan. 22, 2016)
- 34. *Commercial Observer*, "80/50 Vision: The Mayor's Bold Greenhouse Gas Reduction Plan," (Jan. 22, 2016)
- 35. *Building Design* + *Construction*, "Solving the Data Conundrum with Better Tools to Capture, Share, and Analyze Information," (Nov. 24, 2015)
- 36. Capital New York, "City Plans Innovation Labs Across Five Boroughs," (Sept. 15, 2015)
- 37. *FCW: Federal Technology*, "Machine learning, agency missions and finding the shape of the haystack," (July 21, 2015)
- 38. Capital New York, "NYU Research Center to Offer New Civic Data Program," (Apr. 29, 2015)
- 39. U.S. News and World Report, "The Next Silicon Valley?" (Apr. 1, 2015)
- 40. National Geographic, "What's the Big Deal with Big Data?" (Mar. 29, 2015)
- 41. Financial Times, "Olympic Task to Reinvent Tokyo's Heart" (Mar. 29, 2015)
- 42. *Chicago Policy Review*, "Why Inclusive Zones are Not Inclusive Everywhere" (Feb. 27, 2015)
- 43. *San Francisco Business Times*, "If San Francisco Wins Olympics Bid, Don't Expect Big Real Estate Benefits" (Jan. 7, 2015)
- 21. ASEE Prism Magazine, "Don't Miss a Beat" (December, 2014)
- 22. *The Atlantic: Citylab*, "Quantifying the Livable City" (Oct. 21, 2014)
- 23. Urban Land Magazine, "Hudson Yards Rises Above the Rails" (Oct. 6, 2014)
- 24. Globe & Mail, "How the Big Data Revolution Can Help Design Ideal Cities" (Sept. 25, 2014)
- 25. *CNN*, "Hey Internet, Where's My Talking City" (May 26. 2014)
- 26. Engadget, "New York's Next Big Neighborhood Is Its Smartest" (May 7, 2014)
- 27. Fortune, "In Brooklyn, A Grasp at Giving 'Big Data' Meaning" (Apr. 28, 2014)
- 28. Next City, "Hey Honey, Don't Tell the Neighbors I Left the Air Conditioning On" (Apr. 22, 2014)
- 29. Fast Company, "Beyond the Quantified Self: The World's Largest Quantified Community" (Apr. 17, 2014)
- 30. *New York Times*, "Huge New York Development Project Becomes Data Science Lab" (Apr. 14, 2014)
- 31. *Real Estate Weekly*, "Energy Executives Prepare to Take Stock at Annual NYU Conference" (Feb. 19, 2014)
- 32. Canadian Consulting Engineer, "New York City Research Finds Older Buildings More Energy Efficient" (Jan. 28, 2014)
- 33. Sallan Foundation, "We're Beginning to See the Light" (Jan. 27, 2014)
- 34. AlleyWatch, "3 Big Ideas to Change the City" (Oct. 31, 2013)
- 35. *Technal.ly Brooklyn*, "Cities are the Major Unit of Analysis for the Future: CUSP Dep. Director" (Oct. 14, 2013)

- 36. EdTech Magazine, "Big Data 101: How Higher Ed Is Teaching Data Science" (Oct. 9, 2013)
- 37. The Real Deal, "NYU, enviro group to monitor commercial tenants' energy use" (Aug. 13, 2013)
- 38. *Commercial Observer*, "NYU to Identify Energy-Efficient Commercial Real Estate Tenants" (Aug. 13, 2013)
- 39. *CRE Radio*, "Hot Topics in Green Building and Sustainability" (Apr. 19, 2013)
- 40. The Real Deal, "Big data can turn real estate industry on its head: A dispatch from NYU's Schack
- 41. Institute conference" (Feb. 22, 2013)
- 42. *Physics*, "A Different Kind of Impact Factor" (Dec. 19, 2012)
- 43. *Civil Engineering* (ASCE Magazine), "NYC Publishes First Energy Benchmark Report" (Sept. 18, 2012)
- 44. The Wall Street Journal, "Durst Tower to Give Green a New Shade" (Sept. 5, 2012)
- 45. The Wall Street Journal, "London Developers Hope for Olympic-Size Boom" (Aug. 15, 2012)
- 46. Greentech Enterprise, "Data Driving Investment, Scale in Energy Efficiency" (June 7, 2012)
- 47. Examiner.com, "Clean Energy Connections Discusses Intelligent Infrastructure" (June 7, 2012)
- 48. *CNN Fortune*, "London's Extreme Olympics Makeover" (June 1, 2012)
- 49. *The Villager*, "City O.K.'s Roof Rotors up to 55ft Tall for Buildings" (May 31, 2012)
- 50. *CoStar News*, "Financing Green Part II: The Role of Data in Financing Green Improvements" (May 21, 2012)
- 51. *CoStar News*, "Financing Green Part I: Funding Energy Efficient Retrofits and Overcoming Uncertainty" (May 18, 2012)
- 52. *Bloomberg News*, "London Shops Disappear as Olympics Pays \$1.2 Billion for Cycling" (Mar. 13, 2012)
- 53. *New York Observer*, "Transparently Green: Landlords, Tenants, Gear Up for Local Law 84" (Mar. 12, 2012)
- 54. New York Observer, "Olympics Not All It's Cracked Up to Be: Study" (Mar. 8, 2012)
- 55. Bloomberg News, "London's Poorest Area Waits for Olympics" (Mar. 1, 2012)
- 56. *Bisnow*, "Green is the New Value-Add" (Feb. 27, 2012)
- 57. *Newsday*, "Summit: Great Need for LI Housing Options" (Feb. 8, 2012)
- 58. Real Estate Weekly, "Schack Institute to Host Sustainability Conference" (Feb. 8, 2012)
- 59. ArchitectureWeek, "Urban Green Council Announces the EBies" (Jan. 23, 2012)
- 60. The Real Deal, "Sustainability 2.0" (December 1, 2011)
- 61. *Commercial Property Executive Magazine*, "Industry Innovators: CPE Executive of the Year, Rising Star" (Dec. 1, 2011)
- 62. *Fortune Magazine*, "Energy Efficiency: Plenty of Data: Many Confused Landlords" (Nov. 21, 2011)
- 63. *New York Real Estate Journal*, "NYU Schack Center for the Sustainable Built Environment Marks Milestone" (Oct. 25, 2011)
- 64. *Commercial Property Executive Magazine*, "Awards: Six Achievers Find Success Despite the Difficult Economy" (Oct. 10, 2011)
- 65. Bisnow, "Green Big Apple" (Sept. 12, 2011)
- 66. CNN Money, "Energy Efficiency Plan: Hire Someone Else to Pay the Bill?" (July 22, 2011)
- 67. New York House Magazine, "Q&A with Constantine Kontokosta" (July, 2011)
- 68. *National Real Estate Investor*, "Penn Students Take Top Prize in NYU Sustainable Competition" (May 9, 2011)
- 69. Green Real Estate Daily, "Expert Q&A" (May 1, 2011)
- 70. Commercial Property Executive Magazine, "10 Rising Stars in 2011" (April 22, 2011)
- 71. *Green Real Estate Daily*, "UNEP-SBCI and NYU Schack Institute's Center for the Sustainable Built Environment Forge New Partnership to Reduce the Global Carbon Footprint" (Mar. 4, 2011)

- 72. *The Capitol*, "Clean-Tech Job Growth Seen as Solution for State's Economic Development Mess" (Feb. 19, 2011)
- 73. China Civil Engineering Society, "How Sustainable is LEED?" (Jan. 5, 2011)
- 74. Crain's New York, "LEED, the Gold Standard for Green Buildings, Is under Fire" (Jan. 2, 2011)
- 75. NY Inc. Magazine, "Competition Heats Up" (Dec. 14, 2010)
- 76. *The Real Deal*, "Schools Adjust to Market, Too" (Nov. 1, 2010)
- 77. Commercial Mortgage Alert, "Task Force to Tackle Retrofit Loans" (Oct. 8, 2010)
- 78. The Real Deal, "Purchasing Power Changes Hands" (Aug. 1, 2010)
- 79. Commercial Mortgage Alert, "Race is On to Devise Way to Finance Retrofits" (July 16, 2010)
- 80. NY Inc. Magazine, "15 People You Need to Know in New York Real Estate" (June/July, 2010)
- 81. Bisnow, "Sustainability Scholars" (June 17, 2010)
- 82. New York Times, "Showing the Benefits of 'Green' Retrofits" (June 1, 2010)
- 83. Globe Street, "Standing on the Shoulders of Green Giants" (May 28, 2010)
- 84. Real Estate Bisnow, "The Deal Sheet" (May 11, 2010)
- 85. *Connecticut Post*, "Designs on the Future: Creative Concepts Flow for Pequonnock River Banks" (Feb. 24, 2010)
- 86. Portfolio.com, "Commercial Real Estate Loans Keep Dogging Banks" (Dec. 21, 2009)
- 87. Real Estate Weekly, "Schack Opens Sustainability Center" (Dec. 16, 2009)
- 88. *New York Times*, "Some of the Bright Lights of New York's Businesses Are Powered by Wind" (Apr. 21, 2009)

### PROFESSIONAL EXPERIENCE

# 2000- The KACE Group, New York, NY

Founder and Principal

An entrepreneurial real estate investment and management firm that delivers innovative products that balance equity, sustainability, and growth. As Founding Principal, responsibilities include strategic management of a substantial portfolio of properties and affiliated companies across real estate and related sectors. The firm also provides engineering, planning, and economic analysis consulting services. KACE and its affiliated companies have designed, developed, and currently manage and own affordable housing, hospitality, commercial, and mixed-use projects. The firm incorporates innovative sustainable design and construction methods into its projects, achieving LEED certification, carbon-neutrality, and maximum energy efficiency.

### 1999-2000 Tishman Construction Corporation, New York, NY

Project Manager/Project Engineer

Project manager for the renovation of Tishman Realty & Construction Corp.'s executive offices (45,000 sq.ft., \$6M+ budget) at 666 Fifth Avenue. Project engineer for the development of a new 1.1M square-foot (\$300M+ budget) office building at 745 Seventh Avenue. Acted as technical liaison between contractors and engineers, architects, and Tishman personnel.

### 1998-1999 Capital Trust, New York, NY (NYSE: CT)

Financial Quantitative Analyst

Real estate investment bank and finance company. Performed due diligence and risk analysis for the origination of mezzanine loans and the acquisition of commercial mortgage-backed securities.

# PROFESSIONAL LICENSES, CERTIFICATIONS AND MEMBERSHIPS

# **Licenses and Certifications**

- Licensed Professional Engineer, New York State Department of Education
- Certified Planner, American Institute of Certified Planners
- LEED Accredited Professional, US Green Building Council

### Memberships (not all current)

American Society of Civil Engineers, American Planning Association, American Real Estate and Urban Economics Association, National Society of Professional Engineers, New York Association for Energy Economics, Urban Affairs Association, Urban Land Institute

### PROFESSIONAL SKILLS

### Languages

Greek: intermediate reading, writing, and conversation French: elementary reading, writing, and conversation

# **Relevant Computing Skills**

Python, C++, AutoCAD, ArcGIS, SPSS, STATA, SAS, STAAD-III, Primavera, ARGUS, MatLab, Hadoop, R, etc.