

**HOLLY W. SAMUELSON**  
Assistant Professor of Architecture  
Harvard Graduate School of Design  
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## **EDUCATION**

- 2013 HARVARD GRADUATE SCHOOL OF DESIGN DOCTOR OF DESIGN  
Dissertation Topic: *Toward Buildings That Work: Reusing Design-Phase Energy Simulation for Operations-Phase Improvements*. Advisor: Dr. Christoph Reinhart, Professor & Director of Building Technology Program, MIT School of Architecture, (formerly of Harvard GSD). Committee: Dr. Martin Bechthold, Professor Harvard GSD, John Macomber, Senior Lecturer Harvard Business School, Dr. Leslie Norford, Professor MIT School of Architecture, Building Technology Program.
- 2009 HARVARD GRADUATE SCHOOL OF DESIGN MASTER OF DESIGN  
Advanced placement. Graduated with distinction and highest grade point average of over 200 graduates. Thesis Topic: *The Effect of Customized versus Default Load Profiles in Simulated Building Energy Use*.
- 2000 CARNEGIE MELLON UNIVERSITY BACHELOR OF ARCHITECTURE  
Tied highest grade point average in history of School of Architecture. University and department honors.
- 1999 DENMARK INTERNATIONAL STUDY PROGRAM  
Semester study abroad in Copenhagen, Denmark
- 1998 CARNEGIE MELLON UNIVERSITY STUDY ABROAD PROGRAM  
Summer study abroad in Rome, Italy
- 1994-1995 ALLEGHENY COLLEGE  
Biology and Chemistry Major

## **ACADEMIC POSITIONS**

- 2013-Present ASSISTANT PROFESSOR HARVARD GRADUATE SCHOOL OF DESIGN  
2017-Present AREA CO-HEAD MASTER OF DESIGN IN ENERGY AND ENVIRONMENT  
2012-2013 LECTURER HARVARD GRADUATE SCHOOL OF DESIGN  
2008-2012 TEACHING ASSISTANT/FELLOW HARVARD GRADUATE SCHOOL OF DESIGN

## PROFESSIONAL POSITIONS

### Full-Time Positions

- 2007-2008     **SUSTAINABLE BUILDING CONSULTANT GREEN ROUNDTABLE**  
Boston, MA. Technical consultant to architects, owners, and engineers on commercial building projects. Selected projects listed below. Managed five staff members.
- 2001-2007     **REGISTERED ARCHITECT ADD INC**  
(now Stantec) Cambridge, MA. Designer for multiple commercial, retail, and multi-family residential projects. Selected projects listed below. Environmental task force committee chair and in-house sustainable design consultant.
- 2000-2001     **GRADUATE ARCHITECT CELENTOHENN ARCHITECTURE**  
Pittsburgh, PA. Boutique firm lead by two Harvard Graduate School of Design alumni/Carnegie Mellon Faculty.

### Part-Time Positions

- 2011-2012     **WORKSHOP INSTRUCTOR GREEN CE**  
Ridgefield, WA. Part-time during graduate school. Taught LEED (Leadership in Energy and Environmental Design) workshops nationally. Audience: design and construction professionals. Between Green CE and Sustainable Performance Institute below, taught over 300 hours of professional workshops.
- 2007-2011     **WORKSHOP INSTRUCTOR SUSTAINABLE PERFORMANCE INSTITUTE**  
(formerly Green Roundtable), Boston, MA. Part-time during graduate school. Developed and taught professional workshops nationally on sustainable design, LEED, and daylighting buildings. Audience: design and construction professionals.
- 1999           **INTERN THE DESIGN ALLIANCE**  
Pittsburgh, PA
- 1997           **INTERN WASILOWSKI ARCHITECTS**  
Natrona Heights, PA

## SELECTED PROFESSIONAL PROJECTS

### Selected Consulting Projects

- 2007-2008     **Isabella Stewart Gardner Museum Expansion, Boston, MA**  
Role: Sustainability consultant to owner (solo consultant from Green Roundtable). Performed design review of Renzo Piano Building Workshop and BuroHappold 50% Design Documents. (Later left project to enter graduate school.)
- 2007-2008     **Suffolk University Residence Hall, Boston, MA**



in the built environment that are both economically effective and environmentally impactful.

**Energy Simulation for Design/6470**

Fall 2012, 2013, 2014, 2016

Role: Solo Instructor. This course provides an in-depth introduction to the use of energy simulation in the architectural design process. [In 2012 it was called Simulation for Design and included daylighting.]

**Daylighting/06479**

Fall 2013, 2014, 2016

Role: Solo Instructor. This half-semester course investigates daylight as a form-generator in architecture and advances students' analog and digital analysis skills.

**3rd Semester Core Architecture Studio/1201**

Fall 2011, 2012, 2013

Role: Consultant for six design studios. Provided lectures, desk critiques, and design reviews to ~70 students regarding thermodynamics, building systems, and ecological design issues.

**Parental Leave**

Fall 2015, 2017

**Executive Education**

Annual presenter 2013-present

Course: Energy and Energy Simulation in Buildings.

Harvard Business School and Graduate School of Design *Advanced Management Development Program*

Harvard Business School and Graduate School of Design *Real Estate Management*

Harvard Graduate School of Design *Real Estate Investing, Smart Cities, and Energy Modeling*

**Theses Supervised**

<i>Seung-Hyeok Bae</i>	<i>Master of Design Thesis Supervisor</i>	<i>2018</i>
<i>Esteban Estrella</i>	<i>Master of Design Thesis Supervisor</i>	<i>2018</i>
<i>Tai-Hsin Hsu</i>	<i>Master of Design Thesis Supervisor</i>	<i>2018</i>
<i>Ching Che Huang</i>	<i>Master of Design Thesis Supervisor</i>	<i>2018</i>
<i>Christine Vohringer</i>	<i>Master of Design Thesis Supervisor</i>	<i>2018</i>
<i>Taehyun Jeon</i>	<i>Master of Architecture II Thesis Supervisor</i>	<i>2017</i>
<i>Gregory Hopkins*</i>	<i>Master of Design Thesis Supervisor</i>	<i>2017</i>
<i>Joelle Jahn</i>	<i>Master of Design Thesis Supervisor</i>	<i>2017</i>
<i>Shreejaya Tuladhar</i>	<i>Master of Design Thesis Supervisor</i>	<i>2017</i>
<i>Karno Widjaja</i>	<i>Master of Design Thesis Supervisor</i>	<i>2017</i>
<i>Huishan He</i>	<i>Master of Design Thesis Supervisor</i>	<i>2016</i>
<i>Rufei Wang</i>	<i>Master of Design Thesis Supervisor</i>	<i>2016</i>
<i>Karno Widjaja</i>	<i>Master of Design Thesis Supervisor</i>	<i>2016</i>
<i>Blanca Dasi-Espuig</i>	<i>Master of Design Thesis Supervisor</i>	<i>2015</i>
<i>Ankit Rauniyar</i>	<i>Master of Design Thesis Supervisor</i>	<i>2015</i>
<i>Toon Virochpoka</i>	<i>Master of Design Thesis Supervisor</i>	<i>2015</i>
<i>Ching-Wen Xiao</i>	<i>Master of Design Thesis Supervisor</i>	<i>2015</i>
<i>Liuwei Zhao</i>	<i>Master of Design Thesis Supervisor</i>	<i>2015</i>

<i>Baha Sadreddin</i>	<i>Master of Design Thesis Supervisor</i>	<i>2015</i>
<i>Yujiao Chen</i>	<i>Master of Design Thesis Supervisor</i>	<i>2014</i>
<i>Amaia Puras</i>	<i>Master of Design Thesis Supervisor</i>	<i>2013</i>
<i>Larissa Oaks</i>	<i>Master of Design Thesis Supervisor</i>	<i>2013</i>

*\*Won a \$25,000 fellowship from E2 to turn his thesis project into a real project.*

### **Doctoral Committees**

<i>Yujiao Chen</i>	<i>Doctor of Design, Secondary Dissertation Advisor</i>	<i>TBD</i>
<i>Nari Yoon</i>	<i>Doctor of Design, Secondary Dissertation Advisor</i>	<i>2018</i>
<i>Bing Wang</i>	<i>Doctor of Design, Secondary Dissertation Advisor</i>	<i>2017</i>
<i>Arta Yazdanseta</i>	<i>Doctor of Design, Secondary Dissertation Advisor</i>	<i>2017</i>

### **RESEARCH**

- 2018      **Toward Healthy Buildings for Humans and the Planet: Comparing a High-Tech, Low-Tech, and No-Tech Building**  
 Research Team: Jose Guillermo Cedeno Laurent, T.H. Chan School of Public Health, and Esteban Estrella, Harvard Graduate School of Design  
*Funded by Milton Fund*  
 Role: P. I.
- 2018      **Architectural Design Considerations for Healthy Sleep Environments in Low-Energy Buildings**  
 Research Team: Jose Guillermo Cedeno Laurent, T.H. Chan School of Public Health, Esteban Estrella & Jungmin Han, students Harvard Graduate School of Design  
*Funded by Dean's Fund for Energy and Sustainable Design & Dean's Research Grant Award Program*  
 Role: P. I.
- 2018      **Green Cities: Considerations for Healthy, Low-Carbon, New Chinese Cities**  
 Research Team: Pamela Cabrera & Kenner Carmody, students Harvard Graduate School of Design  
*Funded by Evergrande/Office for Urbanization*  
 Role: P. I. for "Green" portion of larger initiative
- 2016-2018      **New Benchmarking and Performance Simulation Methods for Buildings Based on Energy Use, Comfort, and Health**  
 Research Team: Jose Guillermo Cedeno Laurent, T.H. Chan School of Public Health, Esteban Estrella, Jungmin Han, Christine Tiffin, Shreejay Tulhadar, students Harvard Graduate School of Design  
*Multi-year funding by Harvard University Climate Change Solutions Fund*  
 Role: P. I.
- 2018      **Importance of Cultural Understanding in Building Energy Analysis and Simulation**  
 Research Team: Esteban Estrella & Christine Voehringer, students Harvard Graduate School of Design

- Role: P. I.
- 2018 **A Framework for Predicting Energy Performance, Mold Risks, and Financial Implications for Residential Buildings in Future Climates**  
 Research Team: Jesse Keenan & Pamela Cabrera, Harvard Graduate School of Design, Margaret Kurth & Igor Linkov, Army Corps of Engineers  
 Role: P. I.
- 2017 **Tall, Hot, Zero: Case Study Analyses for a Low-Energy Residential High-Rise in a Hot, Humid Climate**  
 Research Team: Holly Samuelson and Ali Malkawi, Research Advisors  
 Pamela Cabrera, Esteban Estrella Guillén, Jungmin Han, Tai Hsin Hsu, Ching-Che Huang, Anqi Huo, Aurora Jensen, Wenbo Shi, Christine Vohringer, Bing Wang, Xiaoran Wang, Xiaoshi Wang, Bin Yan, Nari Yoon, and Wei Zhang, students/post-docs Harvard GSD  
*Funded by Evergrande/Harvard Center for Green Buildings and Cities. Budget unavailable*  
 Responsible for day-to-day management of 15-person research team  
 Role: Co-P.I.
- 2014-2016 **Parametric Energy & Passive Survivability Simulation in Early Design: High-Rise Residential Buildings in Urban Contexts**  
 Research Team: Sebastian Claussnitzer, Bjarke Ingals Group, Apoorv Goyal, Yujiao Chen, & Alejandra Romo-Castillo, Students Harvard GSD  
*Funded by Dean's Research Grant Award Program  
 Harvard Center for Green Buildings and Cities  
 & Joint Center for Housing Studies*  
 Role: P.I.
- 2014-2015 **House Zero, Pre-Design Research**  
 Research Team: Ali Malkawi Center Director, Yujiao Chen, Blanca Dasi Espuig, Ching Wen Hsiao, Karol Malik, Matan Mayer, Erica Rioux Gees, Alejandra Romo Castillo, Holly Samuelson, Bin Yan, Arta Yazdanseta, Liuwei Zhao, students/post-docs Harvard GSD  
*Funded by Harvard Center for Green Buildings and Cities. Budget unavailable*  
 Led pre-design simulation and research for an energy-positive, building retrofit, demonstration project. Responsible for day-to-day management of 11-person research team  
 Role: "P. I."
- 2015 **Heating Season Comfort & Energy Savings Due to Temperature Destratification**  
*Funded by Big Ass Fans*  
 Role: Technical Research Advisor
- 2010-2014 **Toward Buildings that Work: Reusing Design-Phase Energy Models for Operations-Phase Improvements**  
*Funded by American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE)  
 Real Estate Academic Initiative*

*& International Facility Management Association*  
Role: P. I.

## HONORS / AWARDS

- 2017 **First Place: International Building Performance Simulation Association Student Modeling Competition**, faculty advisor, biennial international competition. San Francisco
- 2014 **Outstanding Young Contributor Award: International Building Performance Simulation Association USA**, biennial national recognition for significant contributions to the field of building performance simulation. Atlanta, GA
- 2013 **First Place: International Building Performance Simulation Association Student Modeling Competition**, faculty advisor, biennial international competition. Chambéry, France
- 2011 **Travel Award: International Building Performance Simulation Association conference**, for meritorious papers by student authors. Travel expenses to Sydney, Australia
- 2009 **Gerald M. McCue Medal: Harvard Graduate School of Design**, for the highest academic achievement of graduating students. Cambridge, MA
- 2009 **Best Paper Prize: ARUP Engineering**, [first author with Christoph Reinhart, second author] for the best paper on simulation and design at the biennial International Building Performance Simulation Association Conference. Glasgow, Scotland
- 2009 **Travel Award: International Building Performance Simulation Association conference**, for the six best student papers of the conference. Glasgow, Scotland
- 2007 **Honor Award for Design Excellence: Boston Society of Architects**, Carmax Home Office project. Project role: co-project architect and sustainable design coordinator. Boston, MA
- 2007 **Award of Distinction for Sustainable Design: American Institute of Architects New England**, Carmax Home Office project. Project role: co-project architect and sustainable design coordinator. Boston, MA (For other awards, see project under “Selected Architecture Projects” above.)
- 2002 & 2005 **Employee Honor Award**, ADD Inc (now Stantec), monetary award made annually to 1-3 employees out of 150 for exceptional contribution to a team working environment.
- 2000 **Henry Adams Medal: American Institute of Architects**, for the top-ranking architecture graduate at Carnegie Mellon University. Pittsburgh, PA

## PROFESSIONAL ACCREDITATION

- 2006 **Architecture Registration**, Massachusetts
- 2005 **Architecture Registration**, National Council of Architecture Registration

- Boards
- 2005 **Architecture Registration, Texas**
- 2002 **Leadership in Energy and Environmental Design (LEED) Accreditation,**  
Among the first 0.1% of accredited professionals

## SELECTED PUBLICATIONS

### Peer-Reviewed Journal Articles

- 2018 "Optimal Control of HVAC and Window Systems for Natural Ventilation Through Reinforcement Learning," Chen, Y. [student advisee], Norford, L., Samuelson, H., Malkawi, A., ***Energy and Buildings***, March 2018.
- 2017 "The Impact of Window Opening and Other Occupant Behavior on Simulated Energy Performance in Residence Halls," Cedeno Laurent, J. G., Samuelson, H.W., Chen, Y., ***Building Simulation***, December 2017
- 2016 "Parametric Energy Simulation in Early Design: High-Rise Residential Buildings in Urban Contexts," Samuelson, H.W., Claussnitzer, S., Goyal, A., Chen, Y., Romo-Castillo, A., ***Building and Environment***, May 2016
- 2016 "Integrated Design Workflow and a New Tool for Urban Rainwater Management," Chen, Y. [student advisee], Samuelson, H.W., Tong, Z., ***Journal of Environmental Management***, April 2016
- 2015 "Analysis of a Simplified Building Energy Model Calibration Procedure for 18 Real-World Case Studies," Samuelson, H.W., Ghorayshi, A., Reinhart, C., ***Journal of Building Performance Simulation***, January 2015
- 2012 "Non-Technical Barriers to Energy Model Sharing and Reuse," Samuelson, H.W., Lantz, A., Reinhart, C., ***Building and Environment***, July 2012
- 2011 "Learning by Playing – Teaching Energy Simulation as a Game," Reinhart, C., Dogan, T., Ibarra, D., Samuelson, H.W., ***Journal of Building Performance Simulation***, October 2011

### Invited and Peer-Reviewed Conference Paper

- 2015 "Parametric Energy Simulation of High-Rise Multi-Family Housing," **Samuelson, H.W.**, Goyal, A., Romo-Castillo, A., Claussnitzer, S., Chen, Y., Bakshi, A., ***Proceedings of Simulation for Architecture and Urban Design (SimAUD)***, Washington, DC, April 2015

### Peer-Reviewed Conference Papers

- 2017 "Improving Window Selection: A New Workflow and Tool for Architects/Engineers," He, H., Wang, R., Samuelson, H.W., Michalatos, P., ***Proceedings of Building Simulation the International Building Performance Simulation Association (IBPSA) International Conference***, San Francisco, CA, USA, August 2017
- 2015 "Integrated Workflow and a New Tool for Urban Rainwater Management," Chen, Y., Samuelson, H.W., ***Proceedings of Building Simulation the IBPSA International Conference***, Hyderabad, India, December 2015
- 2014 "Post-Occupancy Evaluation and Partial-Calibration of 18 Design-Phase Energy Models," Samuelson, H.W., Ghorayshi, A., Reinhart, C., ***Proceedings***



*of SimBuild the IBPSA and American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE) Conference*, Atlanta, Georgia, September 2014

- 2011 "Identifying Non-Technical Barriers to Energy Model Sharing and Reuse," Samuelson, H.W., Lantz, A., Reinhart, C., *Proceedings of Building Simulation the IBPSA International Conference*, Sydney, Australia, November 2011
- 2011 "Learning by Playing – Teaching Energy Simulation as a Game," Reinhart, C., Dogan, T., Ibarra, D., Samuelson, H.W., *Proceedings of Building Simulation the IBPSA International Conference*, Sydney, Australia, November 2011
- 2009 "Modeling an Existing Building in DesignBuilder/EnergyPlus: Custom vs. Default Inputs," Wasilowski, H. [maiden name], Reinhart, C., *Proceedings of Building Simulation the IBPSA International Conference*, Glasgow, Scotland, July 2009. Awarded Arup Engineering Best-Paper Prize

### **Research Reports**

- 2018 "Green Cities: Energy and Urban Form", Funded report for Office for Urbanization, Harvard GSD, 2018, H. Samuelson, P. Cabrera, K. Carmody.
- 2018 "Tall, Hot, and Zero," Lead editor for funded 170-page research report for Harvard Center for Buildings and Cities, 2018. Ed. H. Samuelson, with fifteen coauthors, listed under "Research" above.
- 2015 "House Zero: Research Report," Lead editor for funded 60-page executive report and 200+ page extended report for Harvard Center for Buildings and Cities, 2015. Ed. H. Samuelson, with twenty contributors listed under "Research" above.
- 2015 "Comparing Modes of Operation for Residential Ceiling Fans to Achieve Thermal Destratification," Samuelson, H., 2015.
- 2010 "Investigating the Importance of Customized Energy Model Inputs," Samuelson, H.W., & Reinhart, C., in *Ecological Urbanism*, Eds. Mohsen Mostafavi & Gareth Doherty, Baden Switzerland, Lars Muller Publishers, pp. 472-475, 2010

### **Publications Featuring Design Work**

- 2007 Carmax Home Office Project. Architecture Boston. January/February 2007.
- 2002 Carmax Home Office Project. Macht, W.P. "Building Green in the Woods," *Urban Land: Journal of the Urban Land Institute*, Vol 66, No. 8 pp. 150-151.
- 2002 Art Interactive gallery. McQuaid, C. "At this gallery viewers become part of the art," *Boston Globe* October 18, 2002 pp. C18, 21.

### **INVITED LECTURES, PRESENTATIONS, SYMPOSIA**

#### **Invited Lectures**

- 2018 University of Toronto, "Climatic Design Strategies"
- 2017 Massachusetts Institute of Technology, *Public lecture sponsored by the MIT*

- Building Technology Program, "Toward More Effective Energy Simulation"*  
<https://architecture.mit.edu/building-technology/lecture/towards-more-effective-building-energy-simulation>
- 2017 Harvard Graduate Consortium of Energy and Environment, "Battle of the Consortium: A Low-Energy Building Design Competition"
- 2016 Keynote Speaker WSP/MM Future of Buildings Conference, Toronto, Ontario "Calibration of Design-Phase Energy Models"
- 2016 Harvard Business School, "The Empire State Building and State of the Art Energy Savings"
- 2015 Harvard University. One of three *public lectures sponsored by: Harvard Brain Science Initiative, Harvard Art Museums, Harvard Museums of Science and Culture*, "In and Out of Sync: How Does Light Impact Health?" Location: Harvard University Science Center, Approx. 200 attendees
- 2014 Harvard Graduate Consortium of Energy and Environment, "Energy Efficiency in Early Architectural Design"
- 2013 Massachusetts Institute of Technology, "Models and Measurements."
- 2012 Lawrence Berkeley National Laboratory. "Bridging Simulation & Practice"
- 2012 U. C. Berkeley College of Environmental Design. "Bridging Research & Practice"
- 2012 University of Pennsylvania Department of Architecture. "Building Simulation: From Drawing Board to Reality"
- 2012 Northeastern University College of Engineering and School of Architecture. "Simulation and the Built Environment"
- 2012 University of Southern California School of Architecture. "Bridging Practice, Research, & Architecture Education"
- 2011 U. C. Berkeley College of Environmental Design. "Bridging Practice, Research, and Architecture Education"
- 2008 Massachusetts Institute of Technology, Center for Real Estate. "Real World Sustainability Strategies: The Unsexy Lecture"

### **Conference/Symposia Presentations**

- 2018 "Innovation 2030: Next Generation" Presentation, *American Institute of Architects Conference*, June 2018. One of 12% of session proposals accepted.
- 2018 "Clima[c]tic Design Game" *Society for Building Science Educators Symposium*, Iowa, July 2018
- 2017 "Simulating Window Operation" Conference Presentation OB-17 *Symposium on Occupant Behavior and Adaptive Thermal Comfort*, Technical University of Denmark, May 2107
- 2017 Moderator. "Next Generation Tools" *Building Simulation, the IBPSA International Conference*, San Francisco, CA, USA, August 2017
- 2016 Invited Speaker/Panelist, "Capturing the Carbon Dividend, Implementing Cobenefits" *Harvard Global Health Institute*
- 2016 Invited Speaker, "Using Parametric Simulation to Design for Future Contexts", *Heliomorphism Conference*, Harvard Graduate School of Design
- 2014 "Post-Occupancy Evaluation and Partial-Calibration of 18 Design-Phase Energy Models," *SimBuild the IBPSA and ASHRAE Conference*, Atlanta,

- Georgia, September 2014
- 2014 "Energy Vernacular: A Simulation-Based Framework for Climate-Responsive Design", Syracuse Center of Excellence *Symposium on Advanced Building Systems*, Syracuse, NY, September 2014
- 2014 "The Energy Optimization Challenge: Teaching Climate-Responsive Design as a Game," *Society for Building Science Educators Symposium*, Tucson, Arizona, June 2014
- 2013 Panelist, *Resilience, Adaptability + Sustainability in the Built Environment*, Real Estate Academic Initiative Harvard University, April 2013
- 2013 "Save Shaheen! An Academic Daylight Retrofit Project." *DIVA (Design Iterate Validate Adapt) Day*, New York 2013
- 2011 "New Life for Existing Energy Models." U.S. Green Building Council's *GreenBuild Conference*, Toronto Canada, 2011. One of 130 sessions accepted out of 1,200+ submissions.
- 2011 "Identifying Non-Technical Barriers to Energy Model Sharing and Reuse," *Building Simulation, the IBPSA International Conference*, Sydney, Australia, November 2011
- 2009 "Modeling an Existing Building in DesignBuilder/EnergyPlus: Custom vs. Default Inputs," *Building Simulation the IBPSA International Conference*, Glasgow, Scotland, July 2009
- 2008 "Daylight Simulation," U.S. Green Building Council's *GreenBuild Conference*, 2008. Off-site education session taught with four other students. Drew 400+ attendees, the largest session of the conference.

## PROFESSIONAL SERVICE

### Leadership Positions

- 2017-Present Co-Head: Master of Design in Energy and Environment Program, Harvard Graduate School of Design. Set requirements, develop curriculum, organize lectures/events, recruit and advise students
- 2017-Present Core Faculty Leader: Harvard Center for Green Buildings and Cities
- 2018 Task-Force Committee Member: Executive Education Task Force, Harvard Graduate School of Design. Developed a new strategic plan for the future of all non-degree programs at the school.
- 2016-present Faculty Advisor: Harvard GSD Executive Education Program
- 2015 Co-Chair: *Simulation in Architecture and Urban Design Conference (SimAUD)*, Washington, DC
- 2014 Chair: Scientific Advisory Sub-Committee ASHRAE/IBPSA USA *Building Simulation Conference*
- 2011-2013 President: International Building Performance Simulation Association (IBPSA) USA, Boston Chapter. Founding member and first elected president. Set a precedent for all local chapters. Hosted multiple technical symposia on energy modeling, attended locally and by virtual participants on five continents
- 2013 Board of Advisors: New Generation Energy, Not-for-profit organization

achieving energy efficiency and energy generation projects for other not-for-profit organizations

2007-2008 National Council of Architecture Registration Boards (NCARB) Pre-Test Committee, Provided quality control for architecture registration exams

2007-2008 Director: GreenBuild Conference Sub-Committee, Organized 13 events for a conference of 30,000+ attendees. Led approximately 50 volunteers

### **Competition/Award Juries and Peer-Reviews**

2018 Project StaSiO (Standard Simulation Outputs) graphic competition with the International Building Performance Simulation Association, online

2017 American Institute of Architects Committee on the Environment, Student Competition, Washington DC USA

2014-present Harvard University Climate Change Solutions Fund Grant

2013 US Green Building Council MA Green Building Awards, Boston, MA USA

2012-present **External Reviewer** for: Building and Environment Journal, ASHRAE Journal, ASHRAE/IBPSA Building Simulation Conference, Passive and Low Energy Architecture (PLEA) International Conference, GreenBuild Conference, SimBuild Conference, Architectural Engineering Institute Conference, Routledge Architecture book submissions, Springer book submission