

BRINGING DIGITALIZATION HOME

HOW CAN TECHNOLOGY ADDRESS HOUSING CHALLENGES?

Harvard Joint Center for Housing Studies Symposium
March 24–26, 2022 at the Harvard Graduate School of Design

AGENDA

as of March 22, 2022

THURSDAY, MARCH 24

6:30 pm

Keynote Lecture

Welcome

Sarah M. Whiting, Dean and Josep Lluís Sert Professor of Architecture, Harvard Graduate School of Design

Designing AI Ethics, in Practice and in Public

Molly Wright Steenson, Vice Provost for Faculty, K&L Gates Associate Professor of Ethics & Computational Technology, and Associate Professor, School of Design, Carnegie Mellon University

FRIDAY, MARCH 25

9:00-9:30 am

Welcome and Overview

Digitalization and Housing

Christopher Herbert, Managing Director, Harvard Joint Center for Housing Studies

David Luberoff, Deputy Director, Harvard Joint Center for Housing Studies

9:30-11:00

How is Digitalization Changing the Ways Housing is Designed and Built?

AI for All: Perspectives and Outlooks on the Role of Machine Learning in Architectural Design

José Luis García del Castillo y López, Lecturer in Architectural Technology, Harvard Graduate School of Design

Modularization Precedes Digitalization in Offsite Housing Delivery

Ivan Rupnik, Associate Professor of Architecture, Northeastern University (presenting paper co-authored with Ryan Smith, Director of the School of Design and Construction and Professor of Architecture, Washington State University, School of Design + Construction and Tyler Schmetterer, Managing Partner, MODX LLC)

Commentators

Elizabeth Christoforetti, Assistant Professor in Practice of Architecture, Harvard Graduate School of Design; Founding Principal, Supernormal

Roger Krulak, CEO, Full Stack Modular LLC

11:00 am **BREAK**

11:30-1:00 pm **How is Digitalization Changing Investments in Housing?**

Big Capital, Precision Technologies, and Structural Power in the US Housing Market

Desiree Fields, Assistant Professor of Geography and Global Metropolitan Studies, University of California, Berkeley

Emerging Models in Residential Real Estate

Mike DelPrete, Global Real Estate Strategist and Scholar-in-Residence, Leeds School of Business, University of Colorado Boulder

Commentators

Roberto Charvel, Managing Partner, MatterScale Ventures; Founder, Vander Capital Partners

Robert Goodspeed, Associate Professor of Urban and Regional Planning, Taubman College of Architecture and Urban Planning, University of Michigan

1:00 pm **LUNCH**

2:15-3:45 **How is Digitalization Transforming the Ways that People Find and Finance Housing?**

Digitalization of the Housing Search: Homeseekers, Gatekeepers, and Market Legibility

Geoff Boeing, Assistant Professor of Urban Planning and Spatial Analysis; Director, Urban Data Lab, Price School of Public Policy, USC (presenting paper co-authored with Julia Harten, Assistant Professor, School of Community and Regional Planning, University of British Columbia and Rocio Sanchez-Moyano, Senior Researcher, Community Development, Federal Reserve Bank of San Francisco)

Algorithms for All: Has Digitalization in the Mortgage Market Expanded Access to Homeownership?

Vanessa Perry, Special Advisor to the Dean's Office, Professor of Marketing, and Professor of Strategic Management and Public Policy, GW School of Business (presenting paper co-authored with Kirsten Martin, Mendoza College of Business, University of Notre Dame)

Commentators

Laurie Goodman, Institute Fellow and Founder, Housing Finance Policy Center, Urban Institute

Lauren Rhue, Assistant Professor of Information Systems, Robert H. Smith School of Business, University of Maryland

3:45 pm

BREAK

4:00-5:30

How is Digitalization Transforming the Ways that Housing is Used?

Empowering Up, Powering Down: The Evolution, Effects, and Efforts to Digitize Energy Controls and Digitalize Energy Information in US Homes

Carlos Martín, Project Director, Remodeling Futures Program, Joint Center for Housing Studies, Harvard University; Rubenstein Fellow, Brookings Institution

Centering the Home in Conversations About Digital Technology to Support Older Adults Aging in Place

Jennifer Molinsky, Senior Research Associate and Project Director, Housing an Aging Society Program, Joint Center for Housing Studies; Lecturer in Urban Planning, Graduate School of Design, Harvard University (presenting paper co-authored with Samara Schekler, Research Associate, Joint Center for Housing Studies and Bailey Hu, Research Assistant, Joint Center for Housing Studies)

Commentators

Ann Forsyth, Ruth and Frank Stanton Professor of Urban Planning, Harvard Graduate School of Design

Therese Peffer, Program Director, California Institute for Energy and Environment, Center for the Built Environment, University of California, Berkeley

SATURDAY, MARCH 26

9:00-10:45 am **How is Digitalization Changing the Ways That Housing is Planned, Reviewed, and Regulated?**

Innovations in Digitalization and the Future of Fair Housing

Nestor Davidson, Albert A. Walsh Chair in Real Estate, Land Use, and Property Law, Faculty Director, Urban Law Center, Fordham University School of Law

Data-Driven Multi-Scale Planning for Housing Affordability

Paul Waddell, Professor Emeritus, City and Regional Planning, UC Berkeley; Founder and President, UrbanSim (presenting a paper co-authored with Arezoo Besharati, UrbanSim)

Creating Action with Data: Using Data to Increase Equity in Urban Development

Sarah Williams, Associate Professor of Technology and Urban Planning; Director, Civic Data Design Lab, and Director, Leventhal Center for Advanced Urbanism, MIT (presenting paper co-authored with Justin Kollar, PhD Candidate, Leventhal Center for Advanced Urbanism, MIT and Niko McGlashan, Research Associate, Leventhal Center for Advanced Urbanism, MIT)

Commentators

Sara Bronin, Professor of City & Regional Planning College of Architecture Art & Planning, Cornell University; Associate Member, Cornell Law School Faculty; Founder and Lead Organizer, Desegregate Connecticut

Kairos Shen, Executive Director and Associate Professor of the Practice, MIT Center for Real Estate

10:45 am **BREAK**

11-12:30 pm **Assessing the Changing Landscape**

Shaun Donovan, Former US Secretary of Housing and Urban Development; former Director, US Office of Management and Budget (Moderator)

Carol Galante, Emeritus Faculty Director, Turner Center for Housing Innovation; former I. Donald Turner Professor in Affordable Housing and Urban Policy, University of California, Berkeley

Seeta Peña Gangadharan, Associate Professor, Department of Media and Communications, London School of Economics

Vanessa Perry, Special Advisor to the Dean's Office, Professor of Marketing, and Professor of Strategic Management and Public Policy, GW School of Business

12:30 pm **ADJOURN**