# **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 January 27, 2022

#### **THURSDAY, MARCH 24**

6:30 pm **Keynote Lecture** 

Welcome

<u>Sarah M. Whiting</u>, 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

<u>Christopher Herbert</u>, Managing Director, Harvard Joint Center for Housing Studies

<u>David Luberoff</u>, Deputy Director, Harvard Joint Center for Housing Studies

9:30-11:00 How is Digitalization Changing the Ways Housing is Designed and Built?

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

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

Modularization Precedes Digitalization in Offsite Housing Delivery

<u>Ivan Rupnik</u>, Associate Professor of Architecture, Northeastern University (presenting paper co-authored with <u>Ryan Smith</u>, 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**

<u>Elizabeth Christoforetti</u>, 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?

Emerging Models in Residential Real Estate

<u>Mike Delprete</u>, Global Real Estate Strategist and Scholar-in-Residence, Leeds School of Business, University of Colorado Boulder

Platform Real Estate and Monopoly Power

<u>Desiree Fields</u>, Assistant Professor of Geography and Global Metropolitan Studies, University of California, Berkeley

**Commentators** 

<u>Roberto Charvel</u>, Managing Partner, MatterScale Ventures; Founder, Vander Capital Partners

<u>Robert Goodspeed</u>, Associate Professor of Urban and Regional Planning, Taubman College of Architecture and Urban Planning, University of Michigan

1:00 pm **LUNCH** 

2:00-3:30 How is Digitalization Transforming the Ways that People Find and Finance Housing?

Searching for Housing Online: The Challenges and Opportunities of Digitalization

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

Algorithms for All: Digitalization and Access to Mortgage Credit

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

**Commentators** 

<u>Laurie Goodman</u>, Institute Fellow and Founder, Housing Finance Policy Center, Urban Institute

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

## 3:30 pm BREAK

## 3:45-5:15 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

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

## Digital Technology and Aging in Place

<u>Jennifer Molinsky</u>, 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

#### **Commentators**

<u>Ann Forsyth</u>, Ruth and Frank Stanton Professor of Urban Planning, Harvard Graduate School of Design

<u>Therese Peffer</u>, 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?

Innovation in Digitalization and the Future of Fair Housing (with Some Notes of Caution)

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

Digitalization and the Transformation of Urban Planning

<u>Paul Waddell</u>, Professor Emeritus, City and Regional Planning, UC Berkeley; Founder and President, UrbanSim

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

<u>Sarah Williams</u>, Associate Professor of Technology and Urban Planning; Director, Civic Data Design Lab, and Director, Leventhal Center for Advanced Urbanism, MIT

#### **Commentators**

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

<u>Kairos Shen</u>, 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**

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

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

<u>Seeta Peña Gangadharan</u>, Associate Professor, Department of Media and Communications, London School of Economics

<u>Andre Perry</u>, Senior Fellow, Brookings Metro and Scholar-in-Residence, American University

#### 12:30 pm

**ADJOURN**