

2nd NIAC Workshop on Urban Science & Engineering Agenda

Location: The University of Washington Botanic Gardens–Center for Urban Horticulture
3501 NE 41st St., Seattle

Tuesday, February 02

Morning Session

- 8:30-8:45** Opening Remarks
- Dr. Norman Beauchamp, Chair, Department of Radiology and Faculty Senate, University of Washington
 - Malin Young, Deputy Director for Science & Technology, Pacific Northwest National Laboratory
 - Michael Mattmiller, Chief Technology Officer, City of Seattle
- 8:45-9:35** Special Presentation
- Charles Catlett, Urban Center for Computation & Data, Argonne National Laboratory and University of Chicago
- 9:35-10:05** Water, Climate Change and Seattle
- Paul Fleming, Climate Resiliency Group, Seattle Public Utilities
- 10:05-10:25** Open Discussions
- 10:30-11:00** Meeting Seattle’s Energy Needs: Harvesting the Potential in Existing Buildings
- Edward Smalley, Renewable Energies Program, Seattle City Light
- 11:00-11:30** Growth, Traffic and Transit: Forecasting the Future for Regional Decision-Making
- Billy Charlton, Puget Sound Regional Council
- 11:30-12:00** Advanced Control of Urban Infrastructures
- Jakob Stoustrup, Energy & Environment Directorate, Pacific Northwest National Laboratory
- 12:00-1:25** **Lunch**

Afternoon Session

- 1:30-2:00** Smart Cities Trends from Around the World
- Jesse Berst, Smart Cities Council
- 2:00-2:30** Urban Data Science @UW
- Bill Howe, eScience Institute, University of Washington
- 2:30-3:00** Challenges and Opportunities in Smart Transportation Research under the Smart Cities Context
- Yin Hai Wang, PacTrans, University of Washington
- 3:00-3:25** Open Discussions

Afternoon Session (continued)

- 3:30-4:00** Understanding the Impact of Human Decision-making and Behavior on Sustainable Infrastructure Management
- Amy Kim, Department of Civil & Environmental Engineering, University of Washington
- 4:00-4:30** Getting Smart About Energy Efficiency: Widget Mentality Cedes to Data Analysis
- Stan Price, Northwest Energy Efficiency Council
- 4:30-5:00** It's a Streaming World: Doing Analytics on Data in Motion
- Mark Greaves, National Security Directorate, Pacific Northwest National Laboratory
- 5:00-5:15** Day 1 Closing Remarks
- Thom H. Dunning, Jr., NIAC
- 5:30 PM** **Workshop Day 1 Concludes**

Wednesday, February 03

Morning Session

- 8:30-9:20** Special Presentation
- Paul Waddell, Professor of City & Regional Planning, University of California, Berkeley
- 9:20-9:50** Urban@UW: The Transformative Potential of Social-Technical Partnerships
- Susan P. Kemp, School of Social Work, University of Washington
- 9:50-10:20** What is the Role of Buildings in Climate Change Mitigation?
- Srinivas Katipamula, Energy & Environment Directorate, Pacific Northwest National Laboratory
- 10:20-10:40** Open Discussions
- 10:45-11:15** An Integrated Regional Earth System Model of Human-Earth System Interactions
- L. Ruby Leung, Earth & Biological Sciences Directorate, Pacific Northwest National Laboratory
- 11:15-11:45** How Microsoft Quietly Built the City of the Future
- Darrell Smith, Global Energy and Sustainability, Microsoft Corporation
- 11:45-12:00** Workshop Closing Remarks
- Thom H. Dunning, Jr., NIAC
- 12:00 PM** **Workshop Day 2 Concludes**