

RCN-SEES: Predictive Modeling Network for Sustainable Human-Building Ecosystems

UNC Charlotte - College of Computing and Informatics

Big Data Analytics: Wellbeing-Centric Human Building Ecosystems *Workshop Call for Participation*

University of North Carolina at Charlotte

Monday, July 22, 2019 – Tuesday, July 23, 2019 (Please submit abstracts and inquiries to SHBE@nova.edu)

The NSF-funded Research Coordination Network (RCN) in Science, Engineering and Education for Sustainability (SEES) announces a special workshop on **Big Data Analytics: Wellbeing-Centric Human Building Ecosystems**, organized by the RCN-SEES: Predictive Modeling Network for Sustainable Human-Building Ecosystems and hosted by the College of Computing and Informatics at the University of North Carolina at Charlotte.

The main objective of this workshop is to develop a long-term, sustainable platform that enables researchers from multiple disciplines to continuously engage in active collaborations under a broader umbrella of **Wellbeing-Centric Human-Building Ecosystems** by employing **Big Data Analytics Research**, inspired by the NSF RCN-SEES vision, and identified from previous SHBE-RCN workshops.

In particular, the participants will engage the discussion by forming several working groups in the topics including, but not limited to, the following themes:

- 1) Fostering new research collaboration related to
 - Human wellbeing-centric technology
 - City-scale research on sustainable human building ecosystems
 - Multi-scales analysis: building, neighborhoods, cities, metros and states
 - Efforts to influence individual behavior related to sustainability
 - Economic and social equity and the spatial benefits from sustainability technology
 - Disaster resilience and sustainability.
- 2) Outreach, information dissemination and communication
 - Shared vocabulary and translation of technical information
 - Repository of challenges and research questions, multi-scale, interactive reference data sets
 - Join symposia/special issue of interdisciplinary publication (journal)
 - Impact of RCN on public/research community
 - Trusted academic-industrial partnership.
- 3) Education and talent development
 - New ways to engage young researchers
 - Additional resource for multi-disciplinary studies.

We encourage participation by data scientists, political/policy scientists, social scientists, engineers, computer scientists, architects, policymakers, and industry to discuss big data analytics research including the application of statistical methods, machine learning / deep learning methods, and visual analytic methods as well as big data architectures to the above-listed topics. The participation is by invitation only. Please submit a short abstract indicating your interests and background in one or more areas suggested above to SHBE@nova.edu for approval. The travel cost will be covered by the grant.

Important Dates

RCN-SEES-SHBE Workshop: July 22-23, 2019
Abstract for Approval Deadline: May 20, 2019
Workshop Registration Deadline: July 1, 2019

Schedule

Sunday July 21st → Informal Reception 6:00pm – 8:00pm
Monday July 22nd → Workshop 8:30am – 4:30pm; Dinner 6:30pm
Tuesday July 23rd → Workshop 9:30am – 2:00pm

Organizational Committee: William Tolone (Chair), UNCC; Yong Tao (Co-chair), Chien-fei Chen, Richard Feiock, Thomas Spiegelhalter, Carol Menassa, Laura Arpan, Yimin Zhu, Wei Yan, Omer Tugrul Karaguzel, and Julia Day.