

**Title:** Climate Change Resilience: A Case for Human-Computer Collaboration in Solving Humanity's Most Urgent Threat

**Date** : 24 January 2020 (Friday)

**Time** : 3:00 PM

**Duration** : 1:00 hrs

**Venue** : SIF 213

**Speaker:** Dr. Meghna Babbar-Sebens

**Abstract:** Failure to mitigate impacts of climate change and adapt to related stresses, extreme events (such as floods, droughts, storms), and natural hazards have all been identified as the top most likely global risks by World Economic Forum in a recent 2019 report. A collective will is critical to tackling these risks. But how do we mobilize a collective problem-solving process in communities for identifying opportunities to build resilience to climate change and adapt to learned lessons? In this presentation, we will examine whether a collaboration between humans and machines could create “new ways” for communities to create solutions for this intractable problem. We will also explore how such a collaboration may look like in watershed communities prone to floods.

**Brief Bio:** Dr. Babbar-Sebens is an Associate Professor of Water Resources Engineering in the School of Civil and Construction Engineering at Oregon State University. She is also the co-director of OSU-Benton County Green Stormwater Infrastructure (OGSIR) Facility, an Oregon BEST Lab. Dr. Babbar-Sebens' research interests lie in the area of Water Resources and Environmental Systems Analysis. She and her students conduct and actively publish peer-reviewed interdisciplinary research in the field of Hydroinformatics to develop innovative and effective monitoring, simulation-optimization, and decision support technologies for sustainable planning and management of water-based systems, including watershed systems, stormwater infrastructure, and systems at the nexus of food, energy, and water sectors. Dr. Babbar-Sebens teaches courses on Fluid Mechanics, Hydrology, Optimization in Water Resources Engineering, Stochastic Hydrology, and Stormwater Design and Management.