The purpose of this workshop is to collect practitioner input into the challenges surrounding the use of data coming from distributed sensors in the context of smart cities and smart campuses. The Internet of things and the advent of using sensors to monitor in real-time the health and efficiency of cities has enormous potential for optimizing spaces around our world. These same elements and related issues are present on college and university campuses in microcosm and solutions could be bridged, piloted and shared among the two communities.

We will attempt to assess the current state of data coming from IoT devices and the technical challenges involved in data-driven decision making. The discussion will center around use cases and open research questions in this space such as data flow (batch versus real-time), trust, uncertainty quantification, data timing, analytics on the edge, digital twins, and validation.