Abstract: The year 2020 will be remembered by many generations as one of the most disastrous years in the U.S. history. We witnessed impacts of a pandemic, wildfires, and hurricanes. According to the National Oceanic and Atmospheric Administration (NOAA), the U.S. sustained historically the largest number of weather/climate disaster events with losses exceeding $1 billion in 2020. NOAA shows an unequivocally increasing trend of such “billion-dollar disaster events” over the years. In response to this pressing challenge, what can we do? The Disaster Data Science Lab has been developing data-driven methods to efficiently assess disaster impacts and recovery so we can better respond to and recover from a disaster event. This seminar will highlight multiple projects in the lab, including 1) assessment of COVID-19 impacts and recovery using Google Street View-like imagery data and GPS-based foot traffic data and 2) assessment of other disaster impacts and recovery (e.g., wildfires, hurricanes, earthquakes). The lab’s research has been supported by the National Science Foundation (CMMI-1824681, 2031119; DMS-1952781; BCS-2121616).

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