

## Harnessing Massive, Crowdsourced Data for Intelligent Decision Making

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Advanced social media, smart phones, and mobile technologies enable unprecedented capabilities for a layman to act as a data collection sensor. Crowdsourced data present arduous challenges for their utilization in disaster relief: they are noisy, unstructured, informal, massive, and unpredictable; and great opportunities such as timely updates, immense coverage, and most of all, collective wisdom. In this presentation, we will introduce an ongoing project—ACT (ASU Coordination Tracker) for Disaster Relief. Using disaster relief efforts as examples, we will elaborate the obstacles of employing crowdsourced data, and illustrate how to turn raw data to usable information for intelligent decision making by innovatively analyzing and processing crowdsourced data. ACT is an inclusive, open-source platform that is aimed to seamlessly integrate with state-of-the-art systems and tools such as social network analysis, multi-agent modeling, visual analytics, etc.; and with new functions necessary for logistics, planning, and response coordination.