

## **Collaborative Virtual Observation (CoVO) in Dynamic Environments**

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This talk deals with a very critical area in video surveillance using a complex hybrid mix of sensors, network routers, servers and pervasive user devices. The main objective of the ongoing work is to develop a framework for collaborative virtual observation in an environment replete with heterogeneous, mobile devices and sensors that can be opportunistically employed to sense the environment, and process and disseminate sensed information. The project work, funded by NSF/EECS combines the concept of Virtual Observer (VO) developed at Curtin University (CU) Australia, and Seamless Service Composition (SeSCo) for pervasive computing developed at the University of Texas at Arlington (UTA), together with novel opportunistic networking principles to create a framework for collaborative virtual observation. Currently, we are investigating trusted service collaboration and distributed service execution in such dynamic networks. The developed framework would enable dynamic and real multimedia querying, resulting in pervasive, real-time surveillance and on-demand virtual tours of urban spaces, including crisis environments.