

**Smart Cities: Intelligent Agents for the Urban Operating System (multiple projects) (\*New - Fall 2018\*)**

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The Urban Operating System for future smart cities will not be a rigidly engineered, monolithic software architecture, or will it be just a sea of services interacting via APIs as specified by rigid business processes, instead it will be a network of Intelligent Agents dynamically interacting to flexibly and contextually achieve the goals of the city. The goal of this project will be to construct a generic intelligent agent shell for the future Urban Operating System. Projects will focus on: Role-based cybersecurity within an intelligent agent framework; Methods of coordination, including bid/propose, negotiation, constraint revelation; Explanation and accountability of agent decisions and actions.

The software that plans, manages and controls the operations of the future smart city will be composed of intelligent agents that cooperate in making decisions and coordinate their actions.