Advances in hardware and wireless network technologies have put us at the threshold of a new era in which small and inexpensive wireless devices will provide ubiquitous access to information and actively create smart environments. This seminar will address various research issues related to wireless sensor networks with emphasis on the development of information management and network architectures and algorithms for a system that consists of inexpensive, wirelessly networked sensors embedded in personal vehicles to provide real-time on-demand traffic information to drivers. Analytical and simulation models will be discussed to study the performance and impacts of the wireless sensor network and ways in which the network complements the existing transportation infrastructure.

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