

Nov 17, 2006 SNC AFTERNOON BREAK-OUT SESSIONS:

The following topics will meet in different rooms starting at 1:30 pm, and rotating twice during the afternoon. Faculty will be participating in these sessions according to their interests and expertise.

(1) Predictability, Robustness, and Power Conservation

- * Responsiveness and reconfigurability to changing operating conditions
- * Robustness with respect to unexpected events or random changes in environment
- * For surveillance, defense, and industrial applications
- * Energy aware operating policies (e.g. routing)
- * Tradeoff: power vs latency

(2) Health care application systems

- * Single versus multi-sensor vital sign monitoring
- * Continuous versus intermittent vital sign capture
- * Demo: Wireless vital sign capture, integration and knowledge management with a pre-hospital mobile DB

(3) Security in wireless sensor networks

- * Identification of the grand challenges in sensor network security, e.g., which feature amongst authentication, integrity, and confidentiality is most critical.
- * Identification of current vulnerabilities in sensor network software and hardware.
- * Recovery procedures against failures and attacks: state-of-the-art and open issues.

(4) Towards write-once run-everywhere SN applications

- * Supporting a virtual, technology-agnostic, sensor network programming paradigm
- * Application development for (dynamic) sensor-networked public spaces
- * Supporting the life-cycle of SN applications
- * New paradigms for programming systems
- * Interfacing physical (SNET) to virtual (Internet)