Wireless networks, distributed systems

- Wireless sensor networks
  - lightweight middleware integrating surrounding context
  - energy saving through temporal and spatial sampling optimization
  - lightweight XML parser for heterogeneous sensors (IoT)
  - routing optimization and service discovery in heterogeneous networks

- Resilient and efficient delivery over Message-Oriented Middleware
  - IoT middleware based on Message Oriented Middleware

- Adaptive service provisioning for emergency communications
  - DTN demonstrator built using phones and laptops providing SMS, multimedia messaging and walkie-talkie communication
  - DTN routing optimization to preserve battery live in emergencies

- Efficient radio access in a heterogeneous wireless network environment

- Providing QoS in ad-hoc networks