Towards Developing Mobile Code for Resource Constrained Wireless Networks
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Motivation
- Wieser’s Vision of Ubiquitous Computing
- NSF Barriers to Disruptive Innovation
- Cyber-Physical Ecosystems
- Global Testbeds for e.g. GENI

Proposed Approach
- Terminal Mobility: Mobile Devices with Opportunistic Communication capabilities.
- In-Network Programming: WSN with Over The Air Programming (OTAP) capabilities.
- Opportunistic Communication

Key Idea
Terminal Mobility + Opportunistic Communication + OTAP = Mobile Code

Problem Definition
- What type of gateway architecture (mobile, static, hybrid, etc) is efficient for the integration of sensor networks with the internet?
- How adequate is the concept of opportunistic communication for resource constrained networking devices?
- How practical is it to consider my architecture for real world deployment? If the feasibility is low then how can it be improved?

Design and Implementation

Results