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Introduction to Ubiquitous Computing

- Introduction to Ubiquitous Computing: ubiquitous, pervasive, nomadic. Mark Weiser, major trends in computing.
- "The Disappearing Computer", Neil Gershenfeld "When things start to think".
- Smart Devices, The Internet of Things, Motes and Smart Dust, available architectures, wireless sensor networks (WSNs), wireless connectivity, example systems.
- The e-Grain Concept, e-Grain packaging, 3D-integration (wafer-level), e-Grain applications.
- The SunSPOT Sensor Network System.
- Location sensing (indoor, outdoor), Sensors for Location Tracking, Comparison of Sensors, Context Sensing.
- Wireless Personal Area Networks, IEEE 802.15.4, Introduction to ZigBee.
- Body Area Networks.