

# CS 525M Mobile Computing

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# Wireless Systems

- Monday's Boston globe, Business and Innovation section had spread called "Wireless 2004"
- 7 pages, collected articles on wireless entrepreneurship
- Roger Etner, Yankee group, industry analyst: *"Wireless still has innovative spirit which is almost disappeared from the wired Internet. ... wireless seems to be Wild, Wild West of Innovation"*
- Excerpts:
  - Boston WiFi "hotspots": [newburyopen.net](http://newburyopen.net)
  - WiFi 101 primer
  - State of RFID technology: applications: e.g. point your cell phone with RFID reader at chain saw in Home Depot, also display consumer report, issues, privacy, etc

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- Excerpts:
  - Mobile versions of weblogs (“called moblogs”): online journals flourishing..+ mobility + cell phone cameras (tools)
  - Wireless Mesh Networks (sensor networks): Smart dust, motes, etc. 3 companies in 128-region: Ember corp (Boston), Millenial Net (Cambridge), Sensicast Systems (Needham)
  - Cellphone entertainment is fast-growing market: \$1 billion by 2006.
  - Roundtable of industry leaders on potential (or hype)
  - Intel lab Hudson chip, code-named Bulverde, optimized for wireless units like smartphones and hand-held devices
  - WiMax: TowerStream Corp, Waltham, Wireless point-to-point broadband, 70 Mbps over 30 miles, IEEE standard, Line-of-Sight

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- Excerpts:
  - Sensicast: Security using sensors. Already adopted by 2 Harvard University museums
  - Each sensor costs \$450, size of TV remote control. Uses 4 AAA batteries
  - Affix sensors to paintings, valuable objects.
  - Every hour sensors send report on temperature, humidity, etc.
  - Alarm goes off, sensors direct cameras to alarm point
  - Can also help alert to spraypainting of artwork
  - Sensicast trying to shrink size of sensors