

WiMAX

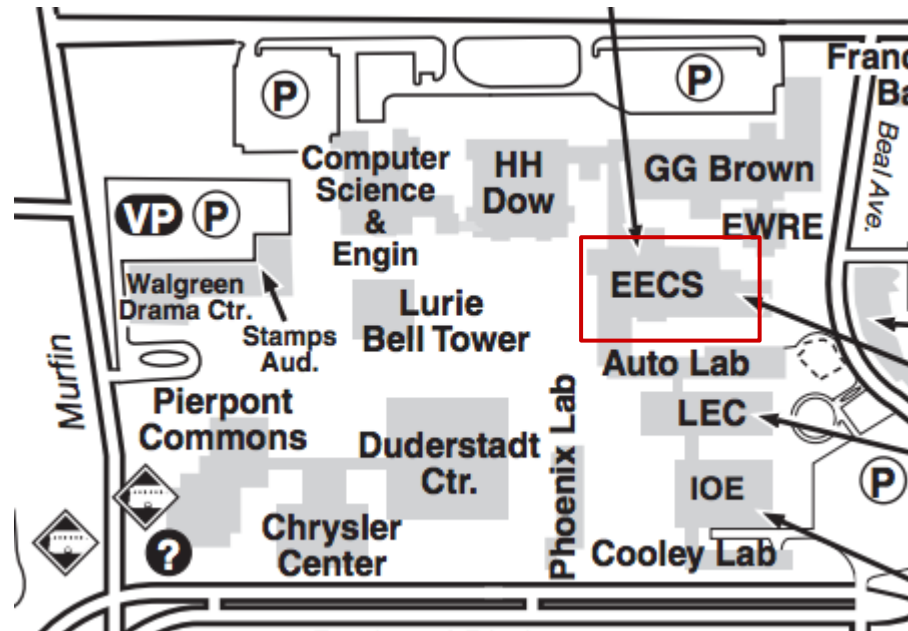
basestation

deployment plan

Z. Morley Mao (University of Michigan)

Single base-station deployment plan

- Deployment location: roof on EECS building of North Campus at Univ of Michigan
 - Direct line of sight to some offices in CSE building
 - Direct line of sight for a large part of the North Campus



Spectrum information

- WiMax channel 1, 2502 to 2512MHz (part of call sign WHQ422).
 - Lease obtained from ClearWire with agreement already signed
- Spectrum analyzer indicates little to no interference within this range
- Ordered several USB dongles as WiMAX client for experiments (from Wisconsin University)

Planned experiments

- Mobile storage based experiments
 - Mobility support for clients with multiple interfaces (WiMAX, 3G, WiFi) to dynamically choose interface based on network conditions
 - Support for adaptive content upload and download
- Possibility to support roaming and handoff across base-stations (if more than one base station is available) or across network interfaces
- WiMAX performance predictor
 - extension to an existing tool (MobiPerf)

