



# Mobile Assisted Localization in Wireless Sensor Networks

N.B. Priyantha, H. Balakrishnan, E.D. Demaine, S. Teller  
MIT Computer Science

*Presenters:*

Puneet Gupta

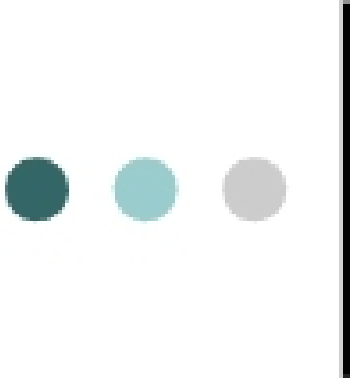
Sol Lederer



# Case for Mobile Assisted Localization

- Obstructions, especially in indoor environments
- Sparse node deployments
- Geometric dilution of precision (GDOP)

Hence, finding 4 reference points for each node for localization is difficult



# Overview of scheme

- Initially no nodes know their location
- Mobile node finds cluster of nearby nodes
- Explores “visibility region” and measures distance
- # of measurements required is linear in the # of nodes
- Virtual nodes are discarded