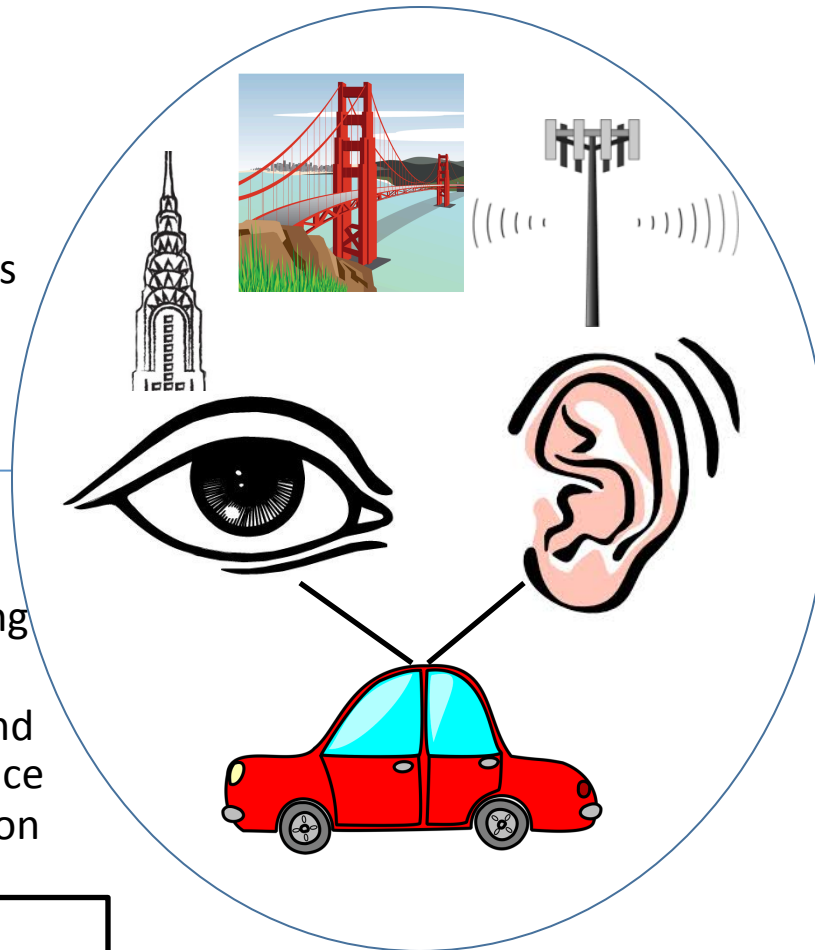# TWC: Small: Evidence of Presence for Intelligent Vehicles using Environment-Based Security

Challenge:

- How to use observed environment factors as evidence of location

Solution:

- Look and listen using camera and radio
- Capture features and convert into evidence for future verification

Scientific Impact:

- Avoid using secret keys and certificates
- Use ideas from wireless localization and visual place recognition for security

Broader Impact:

- Bring together ideas from different disciplines
- New security for systems with camera and wireless
- Opportunities for undergraduate research through REU program