

# CAREER: Inference-Based Adaptation Techniques for Next Generation Jamming and Anti-Jamming Capabilities

Mobile,  
Embedded, &  
Wireless  
Security



## Challenge:

- Understand how adaptive intelligence can feed into jamming attack and defense protocols and design protocols accordingly

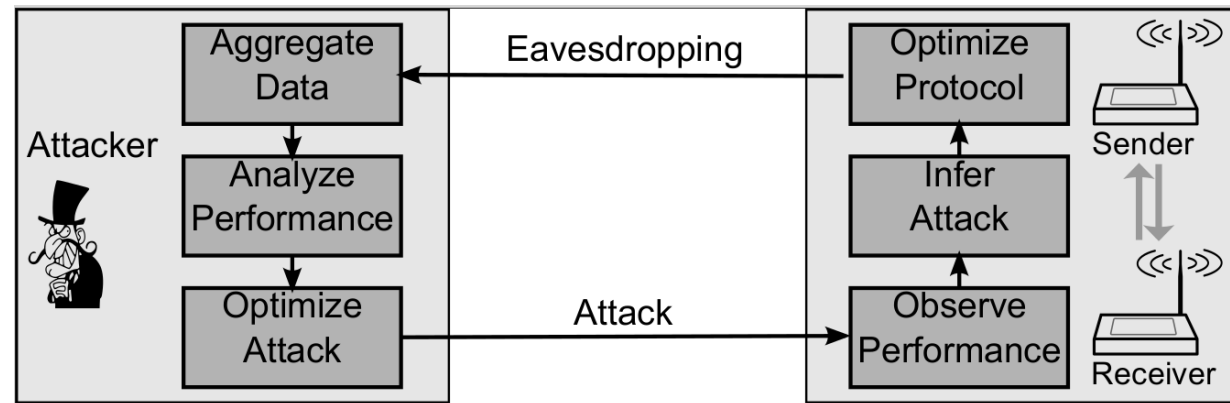
## Solution:

- Incorporated observation-based learning and modeling into jamming attack and defense protocols
- Evaluated and characterized interactions between adaptive attacker and adaptive defender

Project number: CNS 1149582  
Institution: Carnegie Mellon University  
PI: Patrick Tague (tague@cmu.edu)

## Scientific Impact:

- Understanding how communication protocol adaptation can provide diversity against a jamming attack (or for the attackers themselves)
- Expanding the state-of-the-art attack models and defense tools for wireless availability studies and designs



## Broader Impact:

- Improved wireless capabilities for critical infrastructure, mission-critical communication, & network service providers
- Generating software and use cases / examples for use in wireless / SDR educational modules