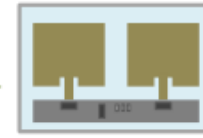


Design



Uplink communication - from tag to reader

- Step 3: decode the bits
 - Pretty simple, $\text{bit} = (\text{CSI_normed_weighted} \geq 0) ? 1:0$
- Some added schemes:
 - Use multiple WiFi channel for redundancy and using majority vote to figure out the bits
 - Use timestamp to cluster packets that stands for the same bit
 - Hysteresis thresholds design for CSI variance

Evaluation

Uplink

- Relationship between: BER & distance, BER & pkts/bit

