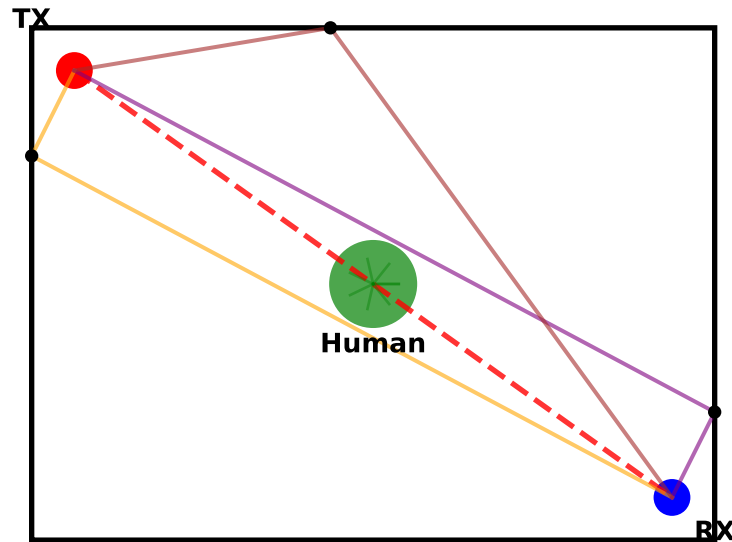
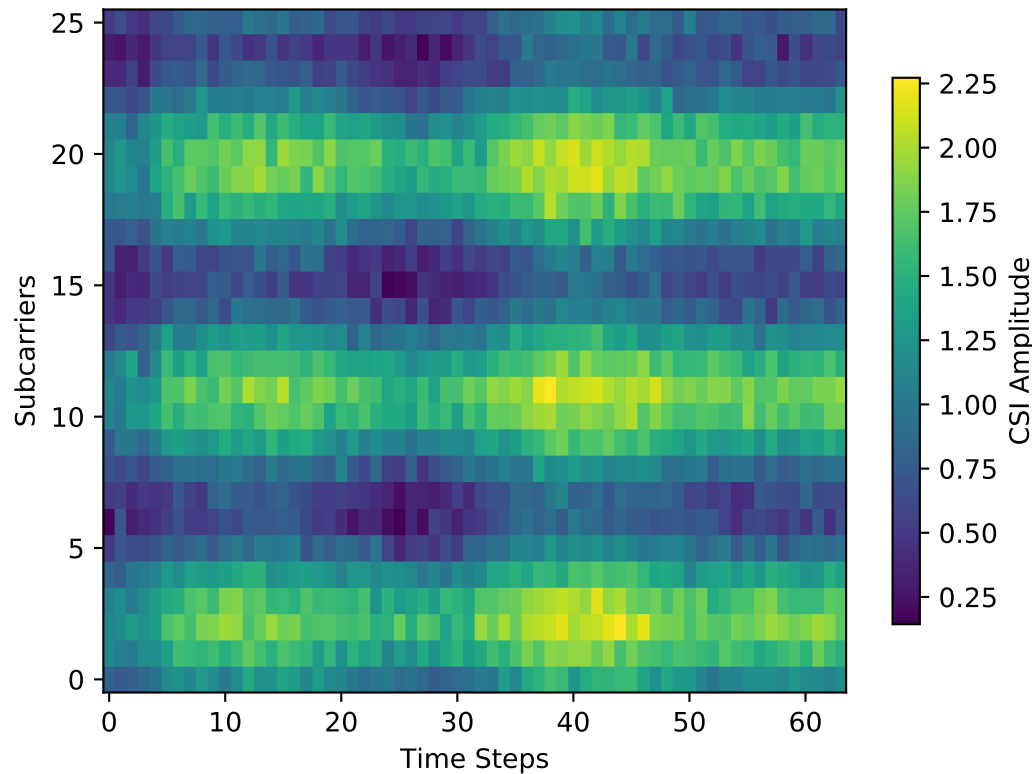


(a) Physics-Based Multipath Modeling



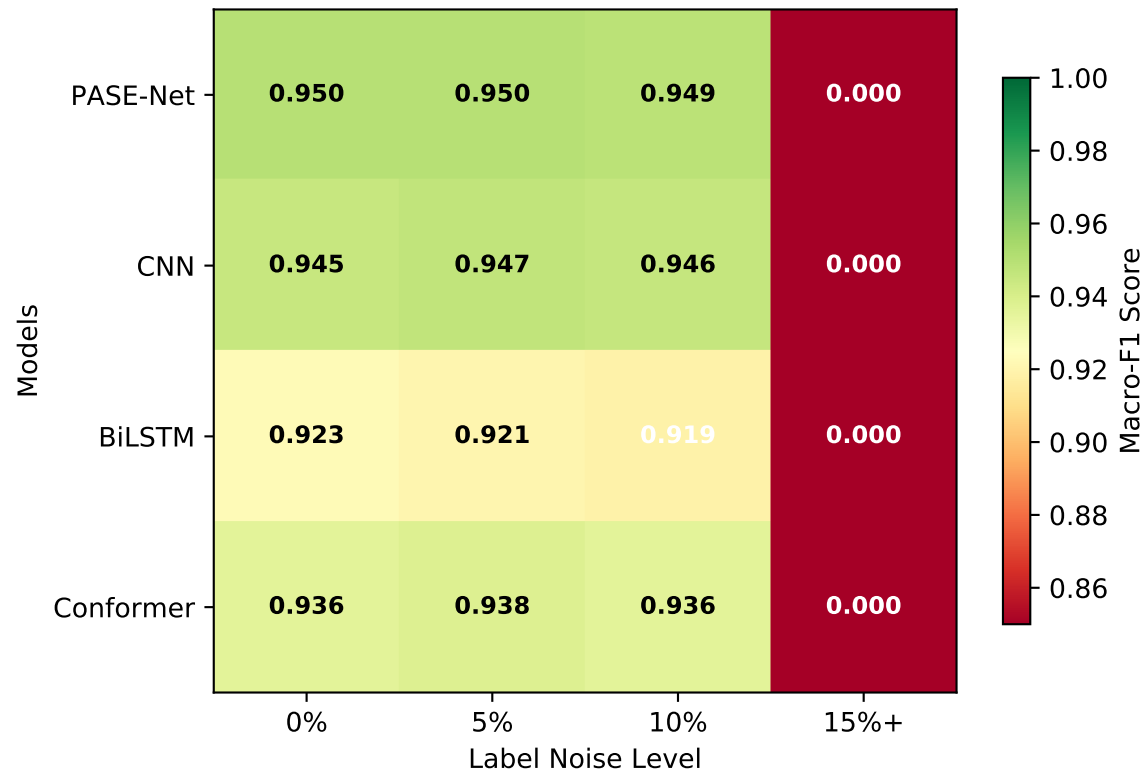
- Environment Factors:
- Multipath propagation
 - Human body scattering
 - Wall reflections
 - Noise & interference

(b) Synthetic CSI Generation



- Synthetic CSI Features:
- Frequency-selective fading
 - Temporal motion patterns
 - Multipath delays
 - Realistic noise levels
 - Shape: [64, 26]

(c) SRV Framework Validation Matrix



- Authentic Results:
- 540 D2 trials
 - Statistically significant
 - $p < 0.001$
 - Best: PASE-Net