Position Tracking for Virtual Reality Using Commodity WiFi
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INTRODUCTION

- Position tracking is a major hurdle to widespread VR adoption
- Potential solution: WiFi

HOW DOES IT WORK?

- WiFi as ToF camera

CHALLENGES

- Challenge #1: Multipath distorts ToF
- Challenge #2: Source and receiver have different clocks

OUR SOLUTION

- Challenge #1: Use multiple antennas to disentangle the overall signal and obtain signal from each of the paths
- Challenge #2: Use multipath to eliminate the clock offset $o(t)$

RESULTS

- Extensive experiments

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