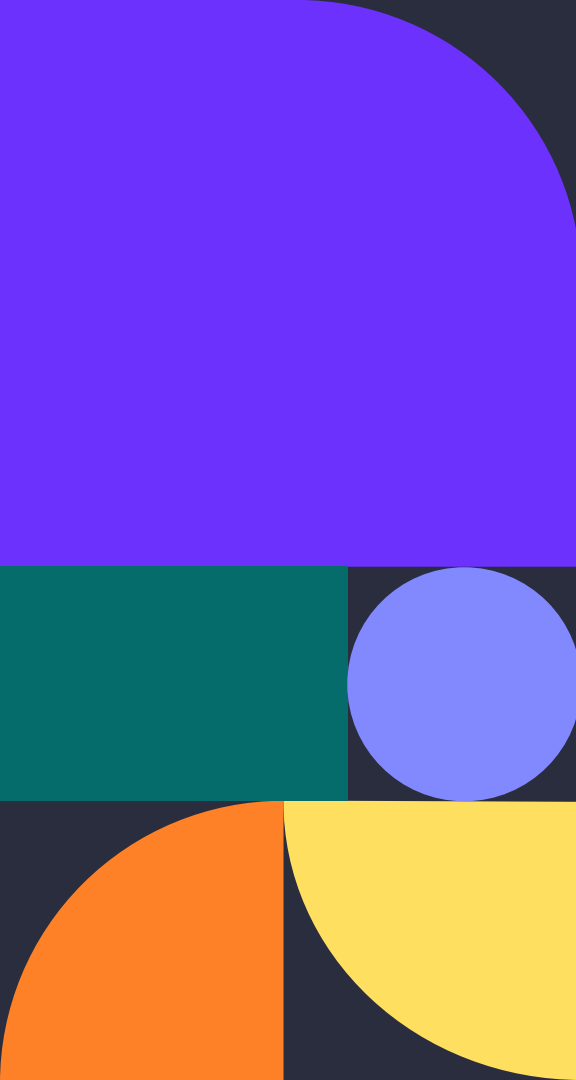




Machine-Induced Noise Mitigation

Advisors: Ivan Seskar, Narayan Mandayam
Team: John-Davis Oyedum, Kyle Friery



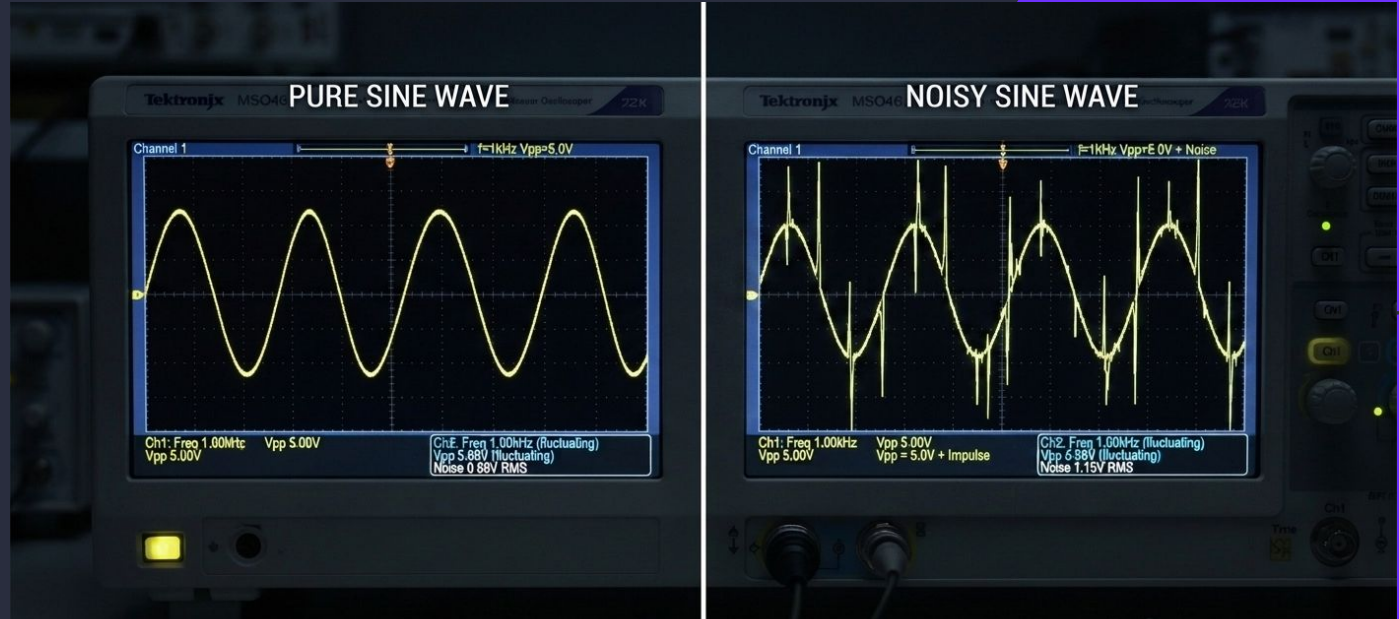
The Problem

- FR3
- Impulsive Noise
- Multipath Interference



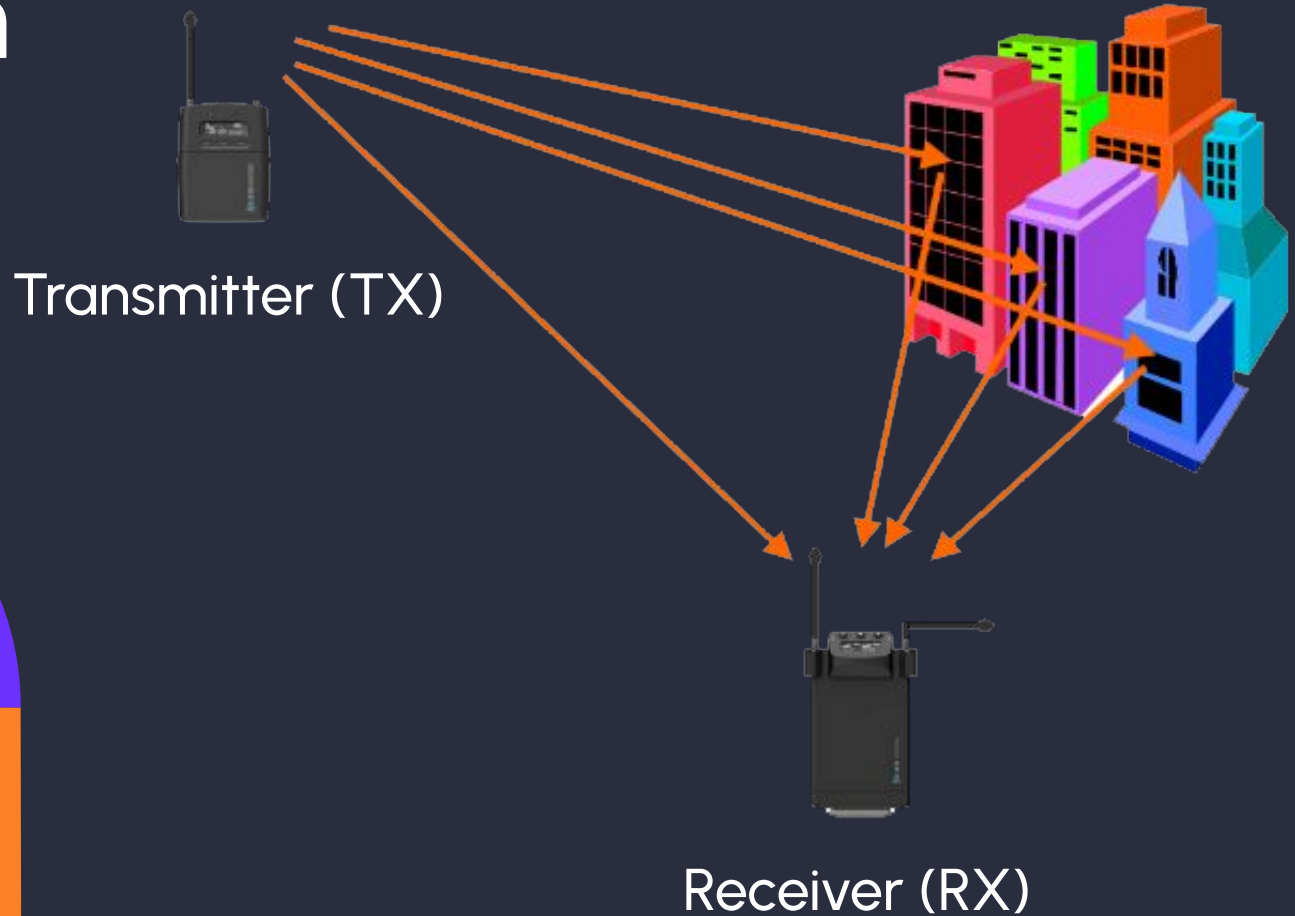
Impulsive Noise

- Very Harsh
- Random
- Machine Dependent



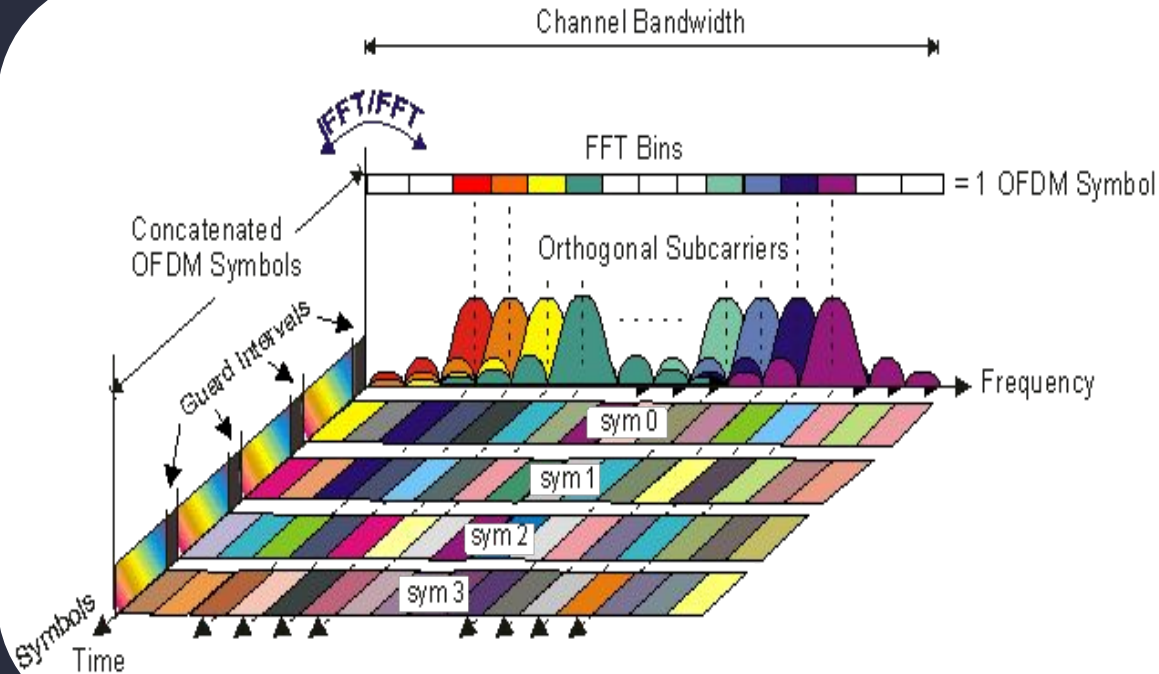
Multipath

- Created by Environment
- Unavoidable



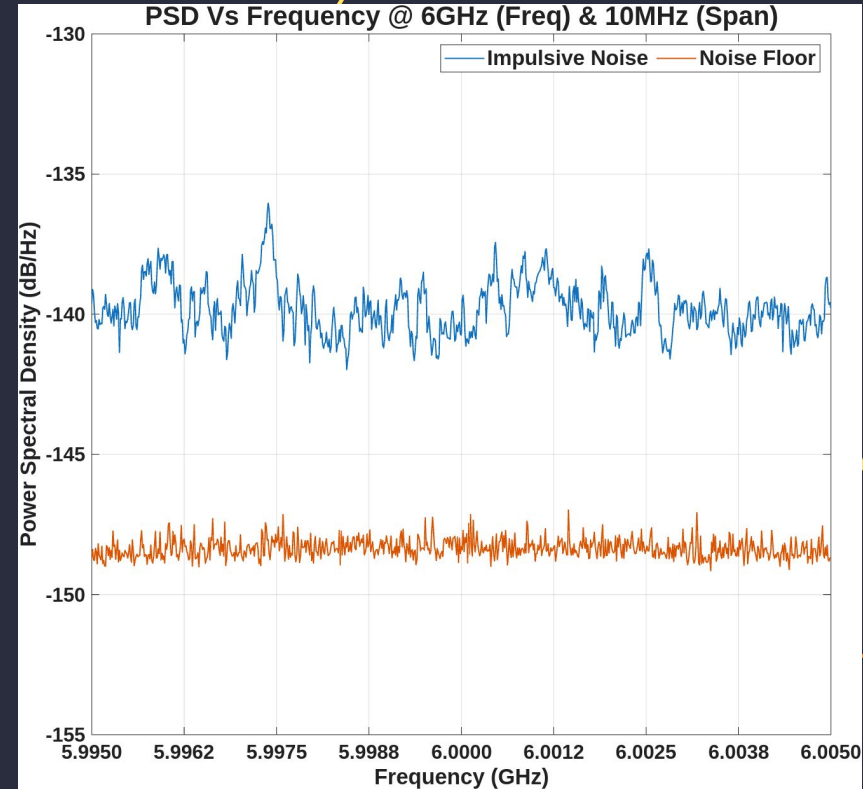
Why OFDM?

- Resistant to Both
- Already in Use



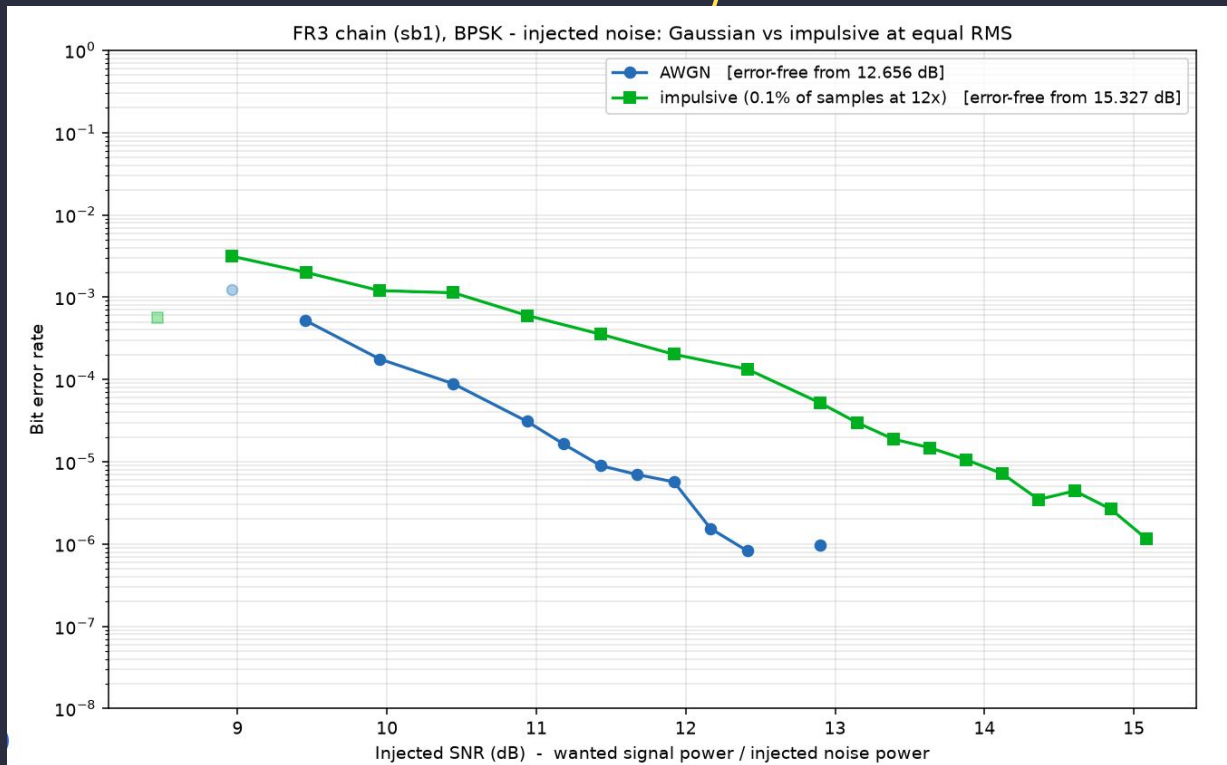
Simulating Noise

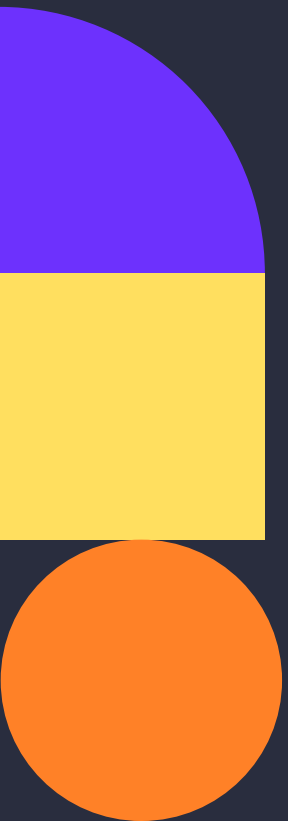
- Emulating Empirical Data
- Developing Model for Synthesized Noise



Emulating OFDM

- Take Singular High-SNR Low-BER Capture
- Inject Noise Model





Future Work

Any Questions?