



# Radio Spectrum Characterization

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# Who We Are

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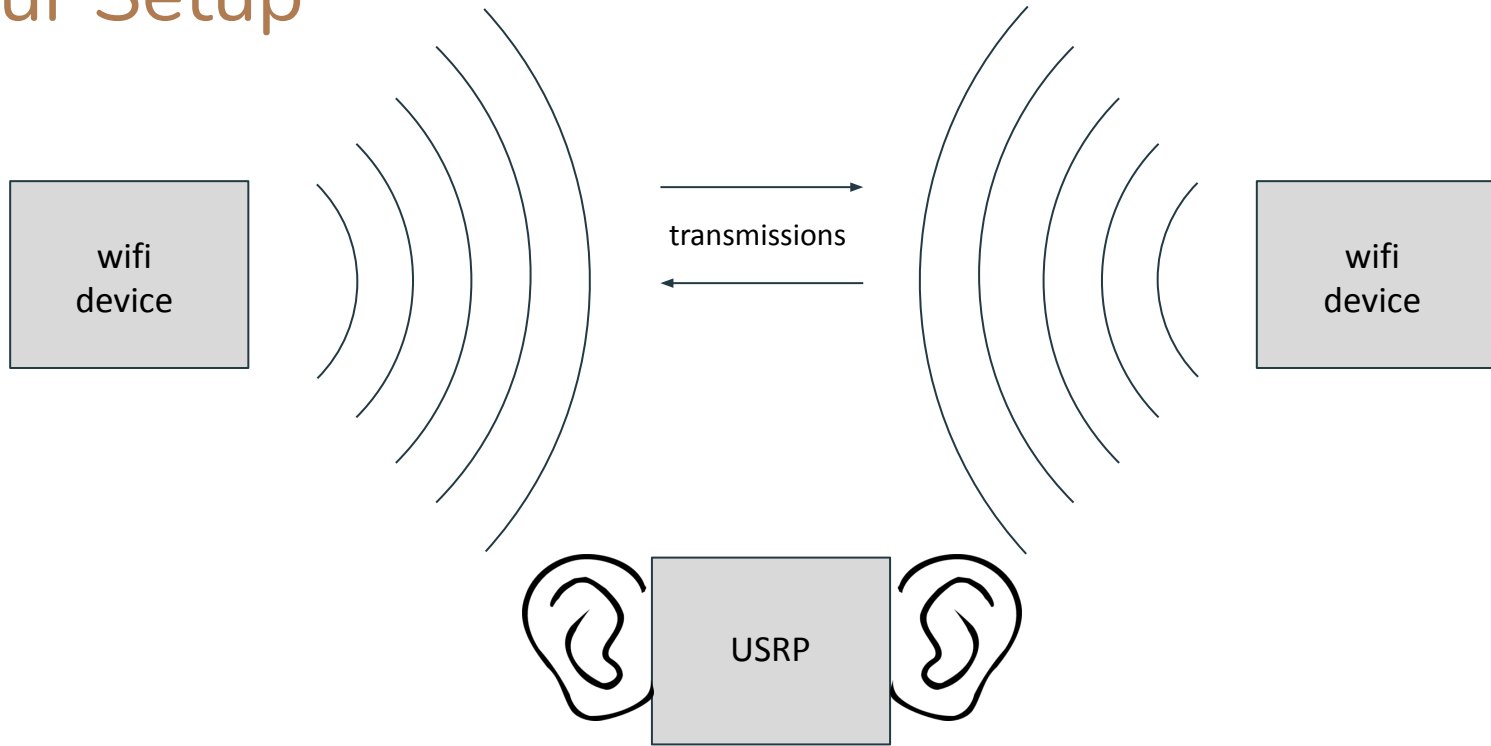


# Our Project

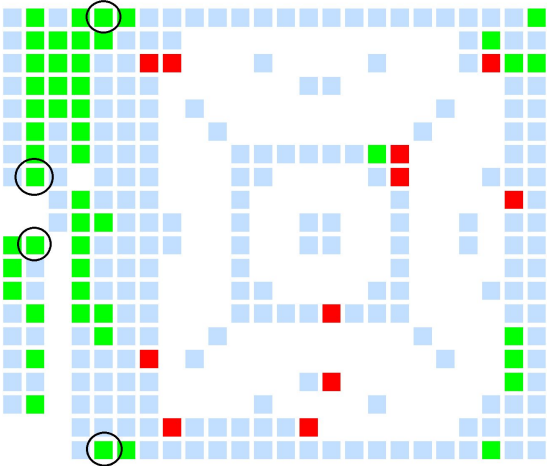
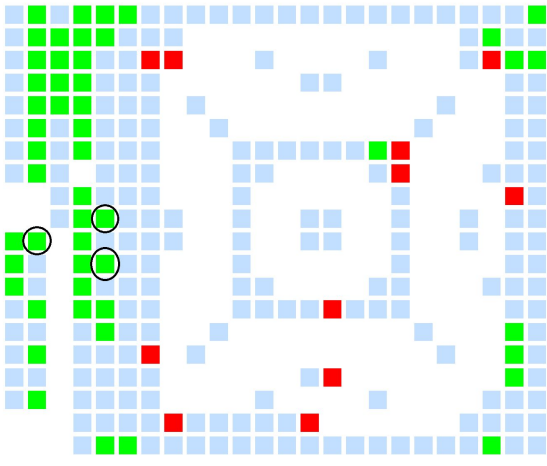
Find out everything we can about the radio spectrum usage in a building.

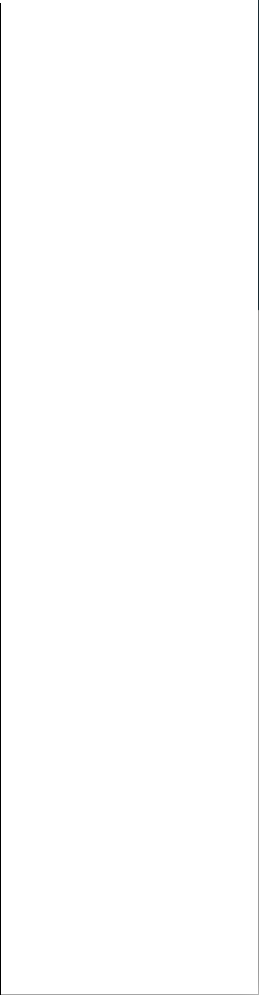
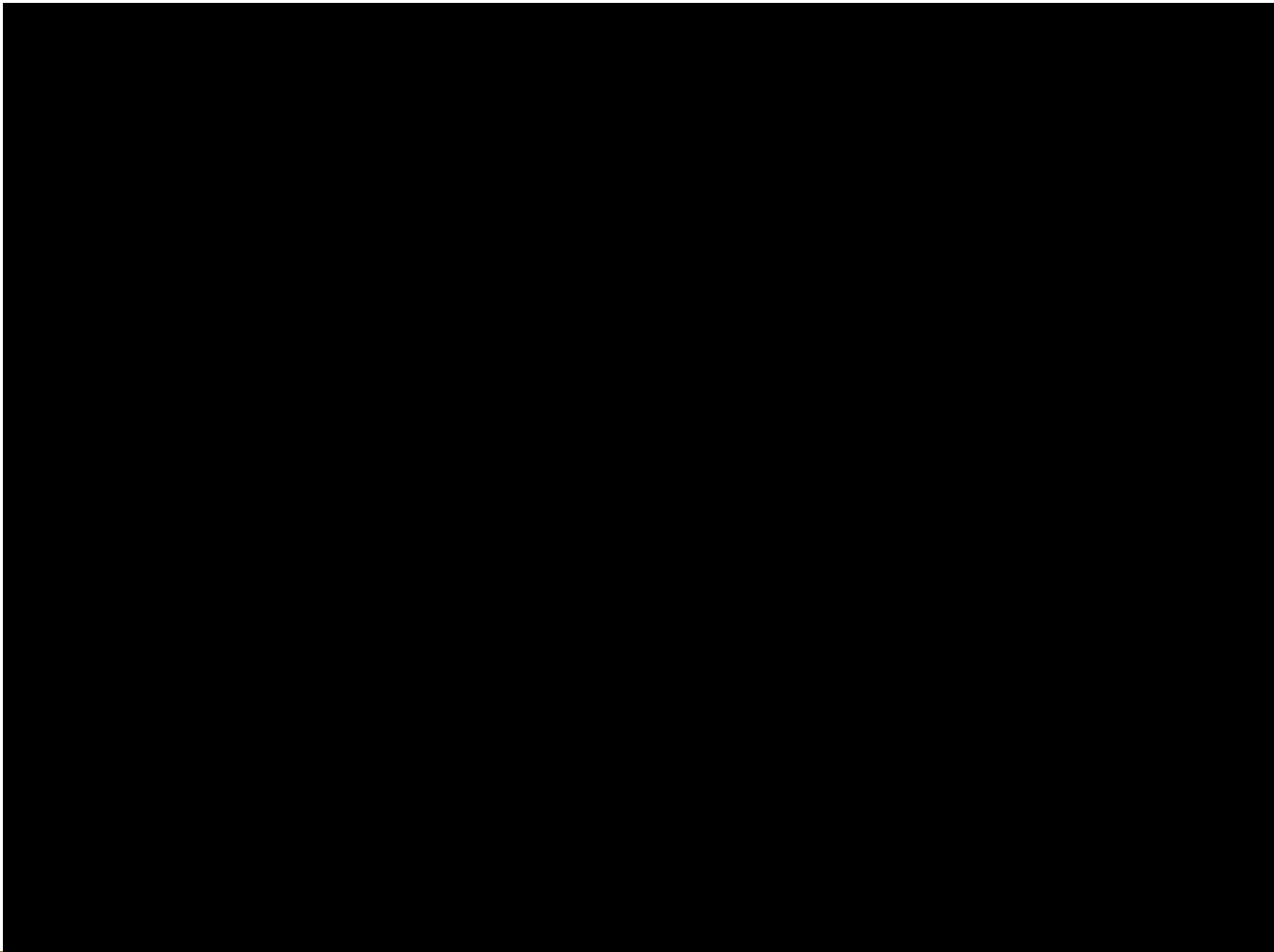
- What are we looking for?
- How are we finding it?

# Our Setup



# Experiment Setups

	Experiment 1	Experiment 2
WiFi devices	Node20-1 Node20-20	Node20-10 Node20-12
SDRs	Node23-8 Node23-11	Node23-11
Layouts	 A floor plan layout on a grid. The layout consists of light blue squares representing walls and open areas. Green squares represent WiFi devices, and red squares represent SDRs. Four white circles are overlaid on the grid, highlighting specific locations: one at the top left, one on the left wall, one on the left wall lower down, and one at the bottom left.	
		 A floor plan layout on a grid, identical to Experiment 1. It shows the same arrangement of light blue walls, green WiFi devices, and red SDRs. In this version, four white circles are overlaid on the grid, highlighting different locations: one on the left wall, one on the left wall lower down, one on the left wall lower down, and one on the left wall lower down.



# Last Week

- ORBIT wiki
- new experiment setup
- scripts
  - WiFi device setup
  - ad hoc network
- sent dummy data (iperf)

# Next Week

- collect usable transmissions from WiFi devices
  - currently too noisy
- get I/Q data
- More experiments!
  - 1 device to 1 AP
  - multiple devices to 1 AP
  - multiple devices to multiple APs



Q & A