

# **WiMAC Bootcamp Week 4: Assignments**

WiMAC Team

# Assignment 4-1: Backoff Number and Finite State Machines

- Finish the “backoff.gvi”
  - Change backoff number every 10000 packets
  - Design your own backoff pattern :)
- Test your code with USRP in RF loopback mode
  - Observe the RX throughput versus backoff number

# Assignment 4-2: Video Streaming with 5 UDP Sources and 1 UDP Sink

- Extend the [vanilla version](#) so that it supports 5 UDP sources
- All you need to do is change [Host code](#)
  - Task 2(a): Create 5 [Host queues](#) (See “802.11 Host Init”)
  - Task 2(b): Create 5 [UDP sources](#) (See “802.11 Configure Data Source” and “802.11 Receive UDP Data”)
  - Task 2(c): Push data from 5 UDP sources to 5 Host queues
  - Task 2(d): Create a [manual video scheduler](#) (a new module) so that you can choose 1 out of 5 video streams anytime
- How to test? Manually schedule 1 video stream using a front panel control