

Background

- information collected from monitoring the spectrum.



- sensing and signal jamming testing
- Software:

GNU Radio, Ubuntu 16.04, MATLAB, Eagle PCB, Packet Sender, OpenWRT

Mi-Find: Channel-Selective Wireless Smart Router

Sponsor: Bascom Hunter Technologies, Inc.

Mentor: Dr. Shuangqing Wei

By: Samuel Accardo, Peyton Cabaniss, Tyler Landry, Amalin Mukerji, Tyler White

Figure 4: Automated averaging and logging

Figure 5 (c): 2.4 GHz Amplifier Physical Layout

BFG403W RF transistor for the basis of the design, the amplifier was designed to increase the gain by 10 dB at an operating frequency of 2.4 GHz. Tuning the signal generator with the designed amplifier to a channel within the Wi-Fi spectrum allowed for effective channel jamming facilitating a channel switch for the system.

BASCOM HUNTER

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