Notes on SDR

J.D. McCormack 2015-07-01

1 Introduction

The following document will contain information related to my efforts in soft-ware defined radio. From time to time, the document may include information on other topics as well. It will initially serve as a day to day journal of my activites. After a certain discovery phase, this document will be updated to create a manual or tutorial for future students to learn from. It is not recommended that the document be used for self study until a newer version is created. Many of the steps that are outlined will be dead ends or poor practices while the discovery process takes place.

2 7-1-2015

Currently working on using the RTL SDR.

What I have learned so far:

- This SDR is different than a FUNCUBE dongle
- It will work from around 500 Hz to 1700 Hz
- It can only RECIEVE

The fact that this can only recieve is by far the largest setback. This will ultimately not be what we can use for cognitive radio.

However, the tutorials still seem more widely available than those found for the BladeRF which is bi-directional. Therefore I will continue for a bit. It may serve a purpose as part of the larger sensor network at some point. We could still use it to relay information over a large distance.

There are "Cubelites" being sent out that are basically funcube dongle based satellites. These sound pretty cool.

I want to start taking notes in Latex so they will be more readable than a plain .txt file and still useable with version control.

I need to install texlive-full and texmaker.

Currently I am set back by needing to update ubuntu. I can't install anything else while the updates are installing.