Transferring & Receiving Of Image Using Gnu Radio

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Aim:-The goal of this project is to wirelessly transfer image from one computer to another computer using Gnu Radio.

We will write all our code for transferring and receiving of image data in Gnu Radio and will use external antenna,front end RF,digital to analog and analog to digital converter for for creating our whole image transferring and receiving model.We will use USRP for this hardware purpose as our Gnu Radio have block USRP sink and USRP source.

The whole project is divided into two stages:
First stage will be like simulation that will perform all signal processing ,including modulation,demodulation,sampling,encoding decoding,etc but this all will be purely simulation type that is without using external hardware all will be performed within Gnu Radio and there will be no real output or communication between two PCs only the data accumulated will be for debugging.

In second stage necessary hardware will be connected and the data will be transferred from one PC to other we will also use Forward Correction Method to minimize the error occurred while transferring the data when the distance between two PC increases

Wireless transmission is limited due to inherent noise.In this project we will use modulation scheme either Binary Phase Shift Keying (BPSK) or Quadriphase Phase Shift Keying (QPSK) depending on which will leads to less noise and in which case we will transfer data to longer distance with less error.Later we will use the method of Forward Correction for minimizing error