EEE 473/573 Project Proposal

In this project, we plan on implementing an MRI simulator in MATLAB. We will use the BrainWeb (http://brainweb.bic.mni.mcgill.ca/) dataset for the simulated brain data. The simulator will gather the k-space data using gradient-echo and spin-echo sequences for three types of modalities. It will operate in ideal conditions; however, we will also simulate some of the non-ideal cases. Also, the simulator will work with various slice thicknesses, ranging from 1mm to 5mm.

<u>Dataset:</u> http://brainweb.bic.mni.mcgill.ca/

Group Members:

Batuhan Uykulu – 21802986

Efe Eren Ceyani – 21903359

Mert Altunsoy - 22101161