# **Project Requirement Specifications**

## **Problem 1**

To design and develop machine learning based algorithm for generating the dimensions of frequency selective surfaces-based radar absorbing materials. The cut off frequency and absorption level will be specified by the user thereby making the approach completely automated and overcoming the problems of trial and error method.

## **Problem 2**

To develop a machine learning based approach for detecting damage in concrete blocks using millimeter wave real-time data. The approach can then be used for various applications such as nondestructive testing, ground penetrating radar, through wall imaging and other radar applications.