SIFT based Object Detection

Problem Statement:

To perform Object detection using Image processing algorithm SIFT.

Description:

SIFT is Scale Invariant Feature Transform. It is an algorithm that can perform Object Detection without prior training. Used in applications where objects to be detected and tracked change very frequently.
A good use case is Missile Navigation with target tracking. Since the target changes every time, we can't rely on DL algorithms which take hours of training hours and huge data.
The project aims to work on a single target image as an input and locate and track the object in the input Video.

Requirements:

Experience with using Python libraries like OpenCV.

Tech-stack:

Python, OpenCV.