

Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID35856
Project Name	Project - A Gesture-based Tool for Sterile Browsing of Radiology Images
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop the model for hand gesture recognition accurately and with low processing time.
2.	Idea / Solution description	Convolution Neural Network(CNN) architecture can be used to get an accurate model. The necessary features can be extracted by convolution and pooling layers without any human intervention.CNN gives high accuracy in image recognition problems.
3.	Novelty / Uniqueness	The novelty of our model lies in providing the best solution which is likely reporting the most accurate pose estimation. Even in situations with high obstruction,less clarity and pose estimation error, the tracking of the hand gesture and orientation by this model is accurate.
4.	Social Impact / Customer Satisfaction	The proposed model is cost efficient, user friendly and also enables the surgeon's focus of attention and high success rate in surgery which gives confident to the patient.
5.	Business Model (Revenue Model)	The decreasing hardware and processing costs makes the gesture recognition model more reliable. This makes the model more practical for widespread use in hospitals for easy interaction and fast response to make the surgery easier.
6.	Scalability of the Solution	With regard to image manipulation, contactless interfaces appear to be more suitable for interventional radiology units that already have a good level of scalability which increases accuracy