**Report on**

**Solar Panel Detection Using Deep Learning**

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**Date:23/05/2021**

**Here showing two folders. One is ProcessOne and another is OptiontwoProcess.**

**Mainly in Process One:**

**For training datasets collected related type datas from internet.**

**Using this datasets created train and validation datasets. Here use**

**create\_dataset.ipynb to create it .**

**Using SolarPanelDetection.ipynb detect solar panel.**

1. **First import the necessary Libraries**
2. **Loading the corresponding image datasets**
3. **Separate it into training (solar, non-solar) and validation (solar and non-solar) imaginary datasets.**
4. **Create corresponding labels from the data**
5. **Creating model using keras**
6. **Now compile**
7. **Finally fit and predict**
8. **Detect the Solar panel**

**OptiontwoProcess is the similar type of process one, but here we split the datasets using train\_test\_split and use Convolution Neural Network for model. Finally fit the datasets and predict the result.**

**If you give me chance then I will do it using OpenCV python and must try to improve accuracy near to 100%.**

**Thank you.**