**Clean Water Project Instructions**

1. Download CleanWaterDataSet.rar from the shared box and Unpack it.
2. Upload the entire unpacked CleanWaterDataSet folder to your google drive.
3. Open this shared notebook:

<https://colab.research.google.com/drive/1LtZMA1Wktlsm5t9NyVP-8xFzDza5zDyL>

1. Click File > Save a Copy in Drive and work on your own saved notebook.
2. Instructions for coding (What you need to code):

* Set DATA\_PATH and FOLDER\_PATH to your paths of CleanWaterDataset and CleanWaterProject, respectively.
* Define your training model in the section of Training. The network structure will affect the model’s accuracy. Try different structures of the network to improve the performance. Run the cell of Training Routine to train the model. Keep in mind that batch\_size and epochs will also affect the prediction accuracy, and batch\_size is also related to the size of the input image. Try to tune them as well. The trained model will be saved to cleanwaterai.h5.
* Test you model: run the cell of Test to see how your model preform via visualizing 20 test images.
* Print your notebook by clicking File > Save > PDF to upload your work.