######## READ ME ##########

How to utilize the codes to reconstruct the model?

1. Select the target image file first. I select P6H.png file as an example image here.
2. Use Matlab software to execute the file which is named thin\_film\_01\_z24.m. By inputting the image file name (P6H.png) into it and then executing it. We can obtain the Mconfig.txt file which contains all the information about the location of the black pixel of P6H.png image.
3. Use the Dev C++ software to execute project1.dev file which contains all the formulas of correlation function and reconstruction. In the same time, Mconfig.txt is inputted into project1.dev to provide the required location information of the black image pixels for proceeding calculation as well. When executing project1.m file and inputting the annealing parameters, you can choose several templates to reconstruct your model efficiently. Since we already combined all the reconstruction code, you can easily choose up to 8 different templates at the same time to efficiently reconstruct your model.
4. Use Matlab software to open the file named picture.m. After rectifying the total pixels number(Np) and image model size(MAXX) according to every different image then you can see the result of simulation.