First, run Blender as administrator and load python script, ColorFabUI.py, into Blender text editor. Then, save the blender file to the same directory as ColorFabUI. Run script to bring up the customized ColorFab panel. User can then import 3D model into Blender workspace.

To voxelize the imported model, user choose a resolution (the higher the resolution is, the more refined the details are), and preview the effect by clicking "Preview." Once user finds a desired resolution, s/he can click on "Process" to change the geometry of the object. After exporting the voxelized model as an OBJ file, user can move on the color assignment.

Next, to assign colors to the outer surface of the voxelized model, user can specify how many colors s//he wants on the outside. To achieve a smooth surface with distinguishable color blocks, user can choose to group multiple voxels in the same color block. For example, if user inputs 3 for "Voxel Size for Each Block," each color block will consists of 3 x 3 voxels. Once user decides on all the parameters, s/he needs to enter the name of the OBJ file of the voxelized model and click "Process". The algorithm will generate one plus number of colors specified by the user OBJ files (one for each of the color on the outside and one for the inside) in the Blender Foundation/Blender directory. All these models combined will produce the original voxelized model.

To prepare STL files for printing, user can simply click on the "Convert All" button to convert all OBJ files.