

User Guide

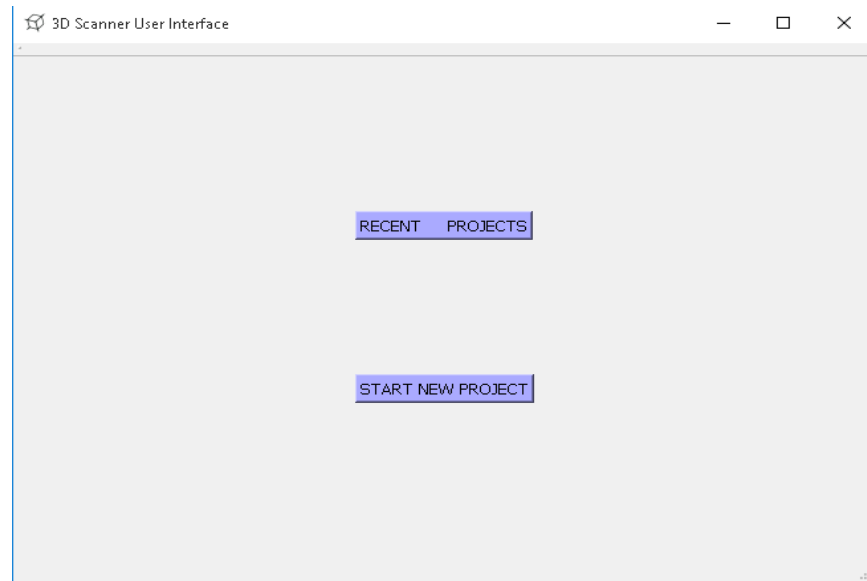
3D SCANNER

January 2017

Contents

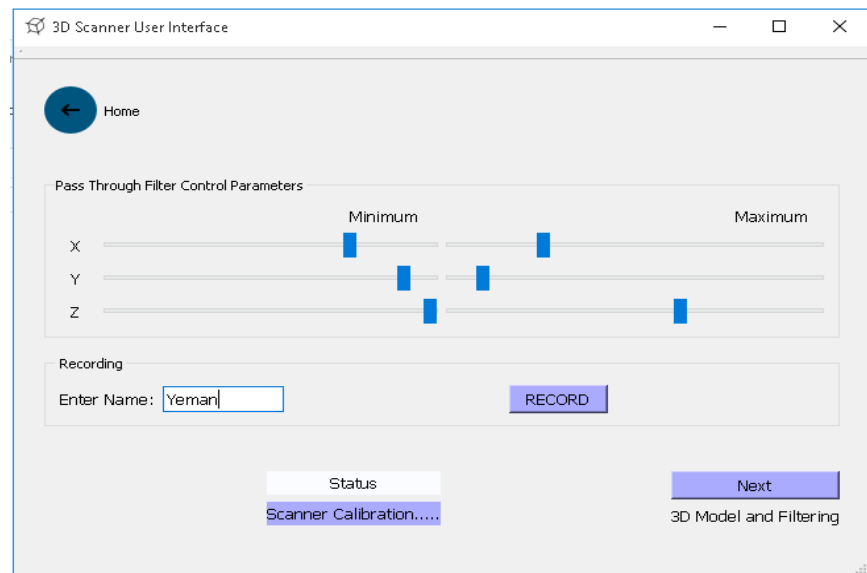
1	Home Screen Window	3
	• To View Recent Projects:	3
	• To Start New Project:	3
2	Calibration Frame Window	4
	4
	• To Set Pass through Filter Parameters.....	5
	• To Start Recording the Frames	5
	• To Go back to Previous Window	5
	• To Proceed with ICP, 3D Reconstruction & Filtering	5
3	Registration and Filtering Window	6
	• To initialize ICP/Registration.....	6
	• For Filtering and Surface Reconstruction.....	6
	• To Go back to Previous Window	6
4	Previously Scanned Files	7
	• To Open Mesh File	7
	• To Go back to Previous Window	7

1 Home Screen Window



- To View Recent Projects:
 1. Click '**Recent Projects**'
 2. This will take you to the Recent project window
- To Start New Project:
 1. Click '**Start New Project**'
 2. This will take you to the Calibration Window
 3. Visualizer will appear

2 Calibration Frame Window



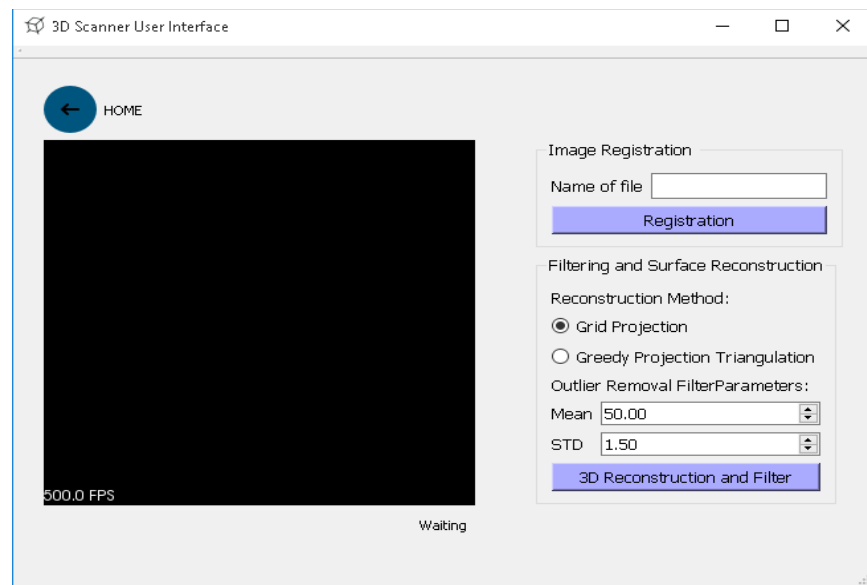
- **To Set Pass through Filter Parameters**
 1. To adjust **X** minimum value, move slider from left to right or vice versa
 2. To adjust **X** maximum value, move slider from left to right or vice versa
 3. To adjust **Y** minimum value, move slider from left to right or vice versa
 4. To adjust **Y** maximum value, move slider from left to right or vice versa
 5. To adjust **Z** minimum value, move slider from left to right or vice versa
 6. To adjust **Z** maximum value, move slider from left to right or vice versa

- **To Start Recording the Frames**
 1. Enter the Name of person in **Enter Name** field
 2. Click **RECORD** button
 3. After clicking Record button, **STATUS** will change to SCANNING

- **To Go back to Previous Window**
 1. Click **Home** button on the top left
 2. This will display Home Screen Window

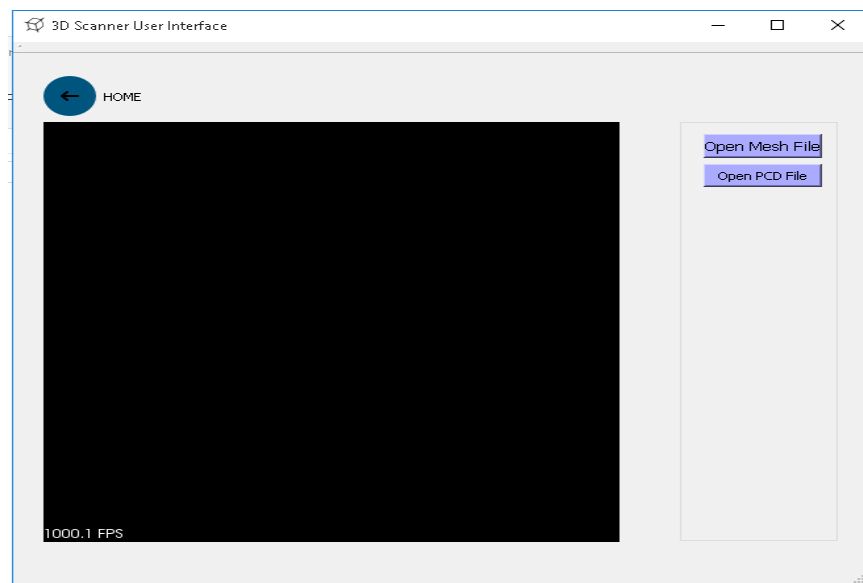
- **To Proceed with ICP, 3D Reconstruction & Filtering**
 1. Click **Next** button
 2. This will display Registration and Filtering Window

3 Registration and Filtering Window



- **To initialize ICP/Registration**
 1. Enter Name in **Name of File** field
 - a. ***Note:** This name should match the name entered in the Calibration Frame Window
 2. Click **Registration** to start ICP
 - a. Status at bottom of the window changes to **Waiting**
 - b. Once the Registration is completed, **Status** changes to Registration completed
 - c. Results are displayed on the **Viewer**, located on left
- **For Filtering and Surface Reconstruction**
 1. Select either Grid Projection or Greedy Projection Triangulation
 2. Set the Parameter of Statistical Outlier Removal
 - a. Set the Value of **Mean** (By default this value is set at 50)
 - b. Set the Value of Standard Deviation **STD** (By default this value is set to 1.50)
 3. Click **3D Reconstruction and Filter** to start 3D Reconstruction and filtering
 4. Status will change to Filtering Started
- **To Go back to Previous Window**
 1. Click **Home** button on the top left
 2. This will display Home Screen Window

4 Previously Scanned Files



- **To Open Mesh File**
 1. Click **Open Mesh File** to select/view the previously saved mesh file from the pop up dialog
 - a. Result will be displayed on the viewer on left
 2. Click **Open PCD File** to select/view the previously saved PCD file from the pop up dialog
 - a. Result will be displayed on the viewer on left
- **To Go back to Previous Window**
 1. Click **Home** button on the top left
 2. This will display Home Screen Window