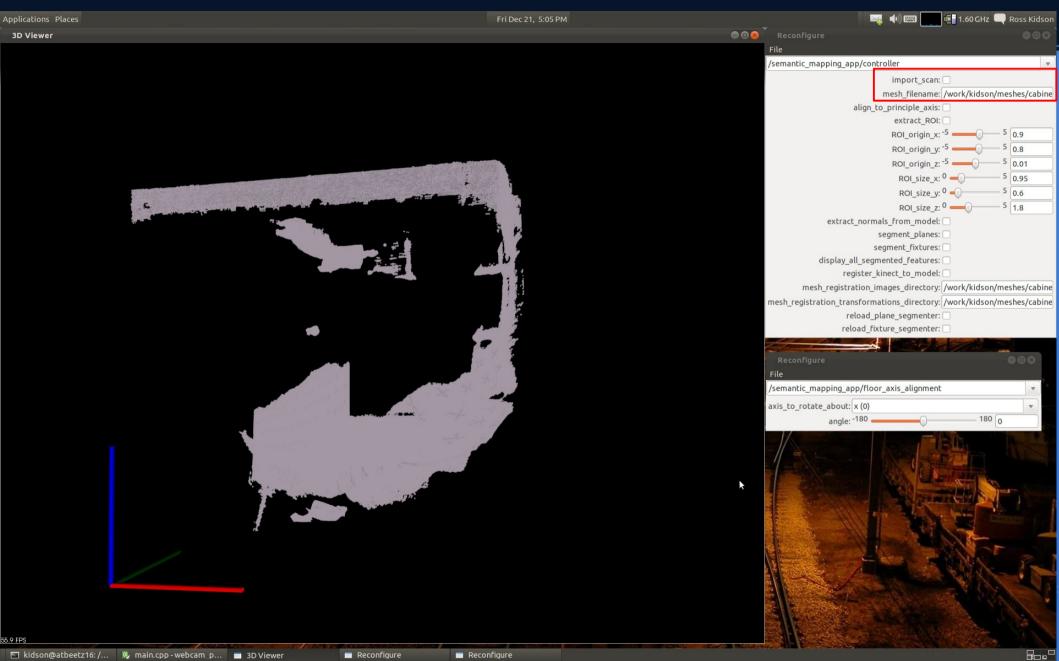
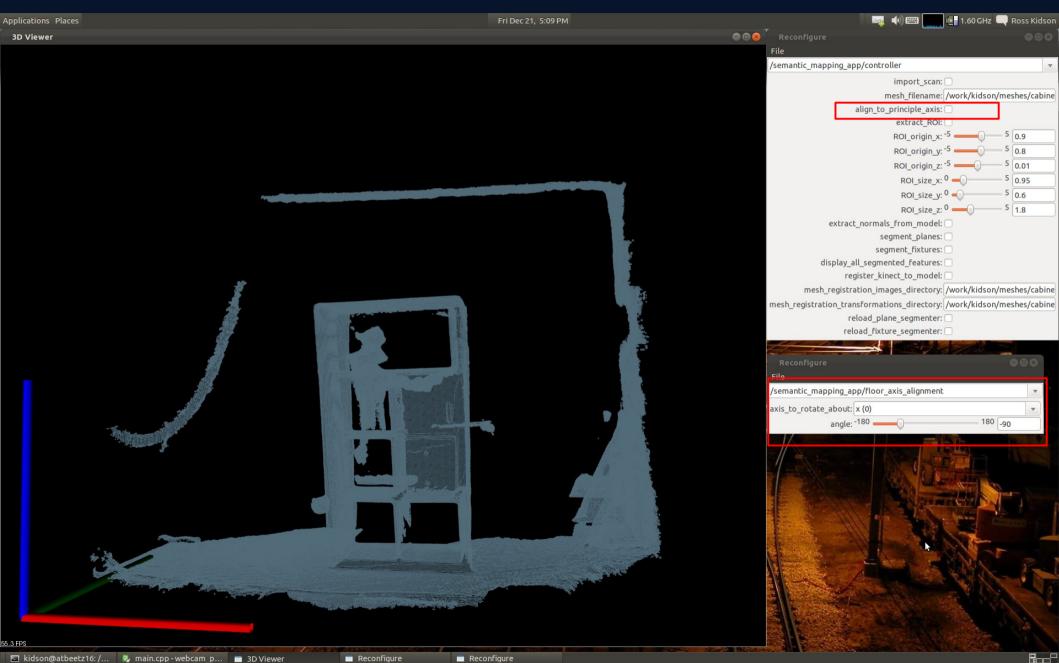
# 1. Import Scan



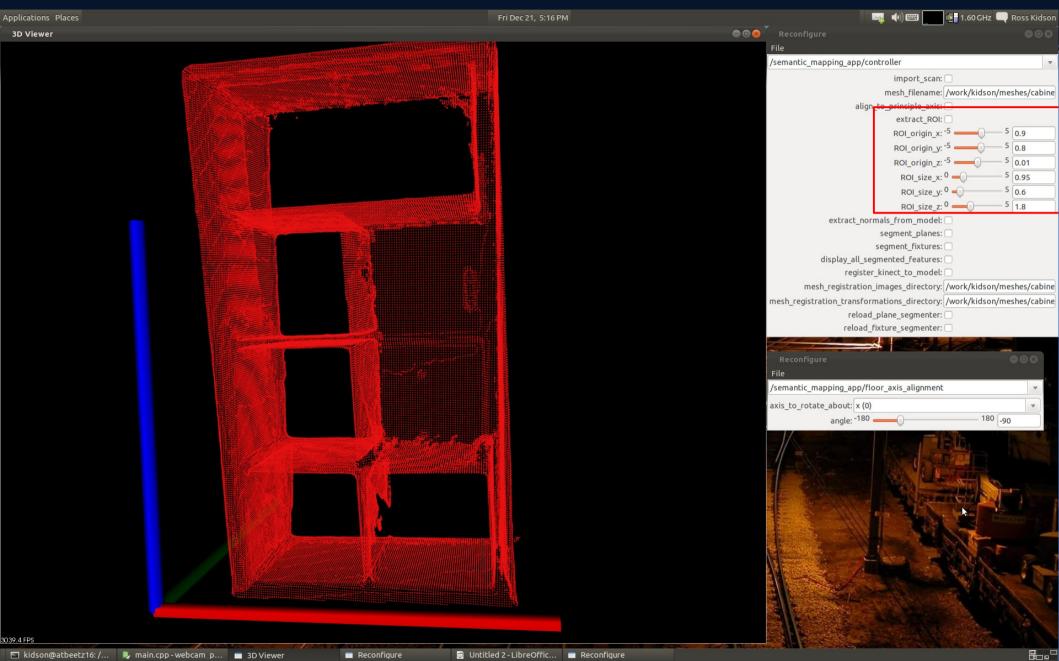
# 2. Align to principle Axes



## 2. Align to principle Axes

- Current operation: user must specify angle/axis rotation to roughly align model to axes
- Suggestions for improved automation/user input
  - 1. After large planes have been segmented, user clicks on planes to label the floor, walls and or ceiling
  - User has some way to rotate either the model or the coordinate system to roughly be aligned to the model

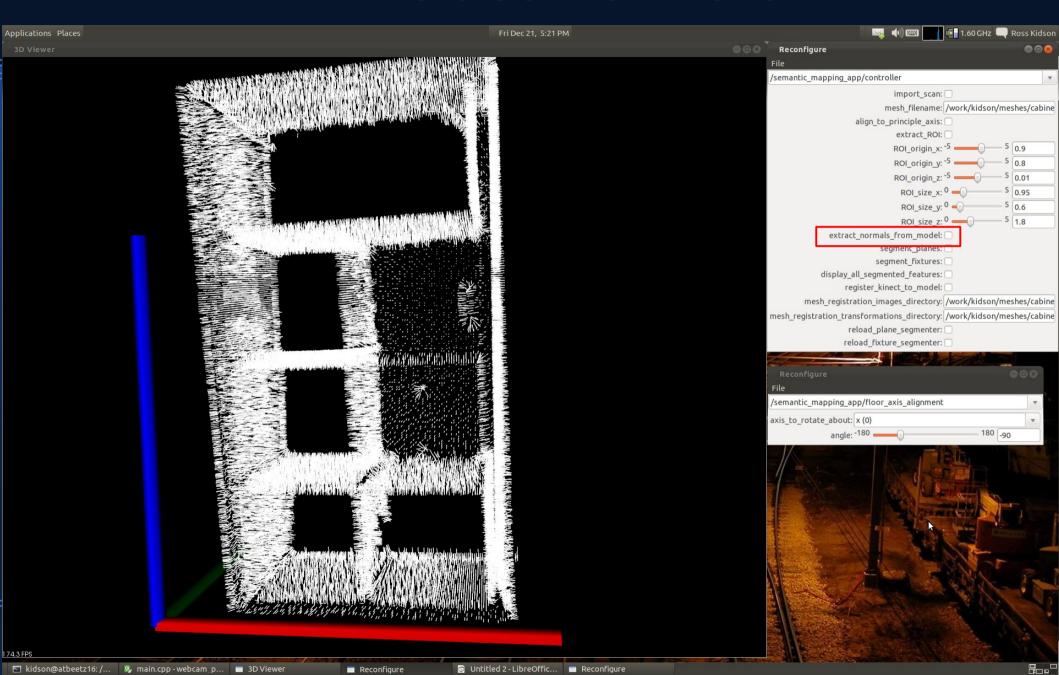
# 3. Extract Region of Interest



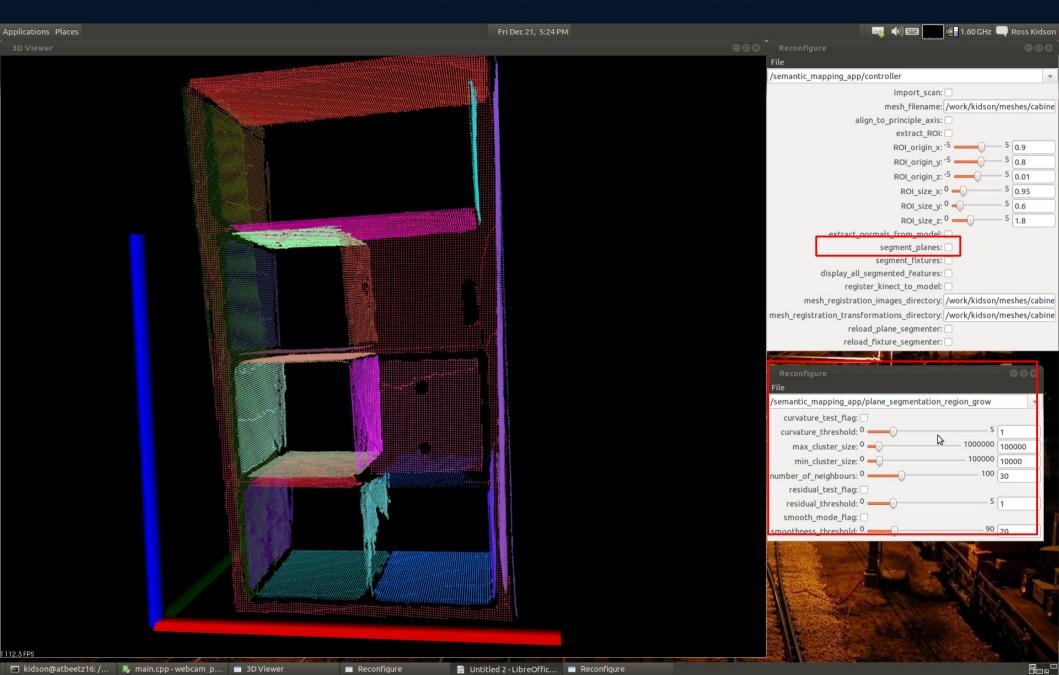
## 3. Extract Region of Interest

- Current operation: User must specify coordinates for an origin as well as the dimensions of the ROI
- Suggestions for improvement
  - A select tool to drag around the ROI
  - Allow the user to move the coordinate system to the correct place

## 4. Extract Normals



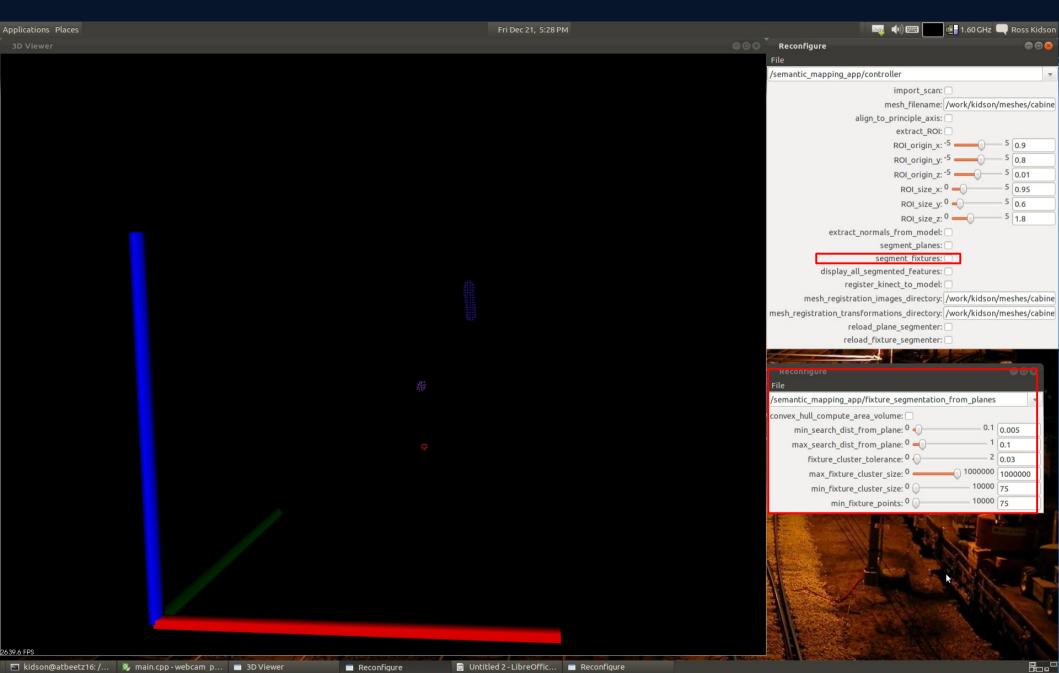
#### 5. Extract Planes



### 5. Extract Planes

- Possible user interactions
  - Select incorrect segmented planes
  - Merge/split planes
  - Label planes
  - Designate planes to certain semantic objects
    - Doors
    - Containers
    - etc.

### 6. Extract Fixtures



#### 6. Extract Fixtures

- Possible user interactions
  - Select which planes to segment fixtures from
    - (the planes from which to look for fixtures is currently hardcoded, but it should be possible to make the algorithm smart enough not to need this input)
  - Select correct/incorrect fixtures
  - Label fixtures
  - Designate fixtures to other semantic objects (doors etc)

### Result thus far

