

# Software Engineering Project Weekly Report

## **3D-KORN**

University of Bourgogne

|                         |                           |                          |
|-------------------------|---------------------------|--------------------------|
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## 1 Tasks Completed

- **Point Cloud Operations Class**

- *Research and documentation about watertightness*
- *Conversion from vtk format to stl*

- **GUI Class**

- *Research, documentation and test for menubar, toolbar and statusbar.*
- *Kinect stream add to the GUI*

- **Scan Registration Class**

- *Compensation with the scanner turntable known center of rotation and angle difference between scans*

- **Kinect Controller Class**

- *Fix the acquisition of null points*
- *Definition of a cropBox for the acquisition of points*
- *Complete the TDK\_KinectV2Controller class*

## 2 Main Goals For Next Week

- **Point Cloud Operations Class**

- *Complete the implementation of watertightness*
- *Save and Load Class*

- **GUI Class**

- *Integration of registration and meshing classes to the GUI*
- *Improvement of the GUI in term of Friendly User Abilities*

- **Scan Registration Class**

- *Research and Documentation for improvements*
- *Complete the Scan registration*

- **Kinect Controller Class**

- *Implement controller functions for R200*

- **Platform**

A reunion with the different groups for the turntable issue has been organized. The main goal is now to evaluate the feasibility of the proposed design. 4 axes of development have been raised:

- *The structure of the turntable itself*
- *The step motor and shield for the Arduino interface*
- *The traction belt*

– *The motor encoder*

- **Knowledge transfer session**

A knowledge transfer session will be organized this week, where each member will share the features implemented and the work in progress with the rest of the team.

### 3 Important links

- Task allocation and progress (<https://goo.gl/WDHEjf>)
- Github repository (<https://github.com/umaatgithub/3D-KORN>)