**[Dataset Contents]**

The dataset encompasses several elements that serve various purposes, including:

* Models in .obj format: These models are utilized for testing path planning algorithms, constructing the deformable environment, and comparing deformation prediction accuracy.
* Quantitative results in .xlsx format: These results are derived from user studies conducted with the intervention simulator and different path-planning guidance.

**[Specific References]**

a) coronary\_model.obj: This model is employed in the author's publication with the following DOIs: 10.1007/s11548-021-02328-x and 10.1016/j.medengphy.2022.103920. Its OBJ format allows for importing it to test path planning algorithms. Additionally, it can be imported into Unity3D to create a deformable environment using the NVIDIA FleX package.

b) user-study-results.xlsx: This file contains data from the user study presented in the author's publication with the DOI: 10.1016/j.medengphy.2022.103920. It encompasses quantitative results obtained from the user study with the intervention simulator, such as operation time, collision count, and scores from the 5-Point Likert Scale questionnaire. The data from this file is utilized to generate Table 4.2 and Figure 4.9 in the thesis.

c) unity16-05-25-897\_3d\_predict.obj and unity16-05-25-897\_3d\_groundtruth.obj: These models are examples for evaluating accuracy in 3D for the author's publication titled "Deformable Model-to-Image Registration towards Augmented Reality-Guided Endovascular Interventions" (currently under review). One model represents the predicted model using the proposed framework, while the other model serves as the ground truth obtained from the simulator. These models can be imported, and the positions of vertices can be extracted and compared to measure accuracy.

d) in-vitro-exp.xlsx: This file contains the in-vitro experimental results from the author's publication titled "Robust Path Planning via Learning from Demonstrations for Robotic Catheters in Deformable Environments" (currently under review). The publication compares two path following methods: centerline following and C-GAIL path following (proposed). Tracking error, targeting error, and duration are recorded and compared between these two methods.