**Cover Note – Submission of data**

**The Editor-In-Chief**

**Journal of The Royal Society Interfaces**

#### Dear Professor Richard Cogdell FRS**,**

As we submit an original research article entitled “*A PointCloud Deep Learning Model for Predicting Lumen Gain and Arterial Damage: A Surrogate for Finite Element Simulation of Stent Deployment”* for consideration to be published in the ***Journal of The Royal Society Interfaces,*** the following data is submitted on the link:

On the link the following data is submitted:

1. Six (6) input files (out of 80) used to run finite element simulations for generating the dataset for training the machine learning code/model. The input files have plaques with profiles shown in Fig.1 of the manuscript
2. An excel sheet containing the corresponding dataset obtained after running finite element simulations using the input files in **1)** above. This is part of the data that is used for training the Machine Learning model/code.
3. A python script/code used for extracting and generating dataset (contained in the excel sheet in **2)** above) from the finite element simulations results, i.e., ODB files.
4. Three (3) excel sheets each containing data for the validation datasets and prediction results
5. Machine learning code/model