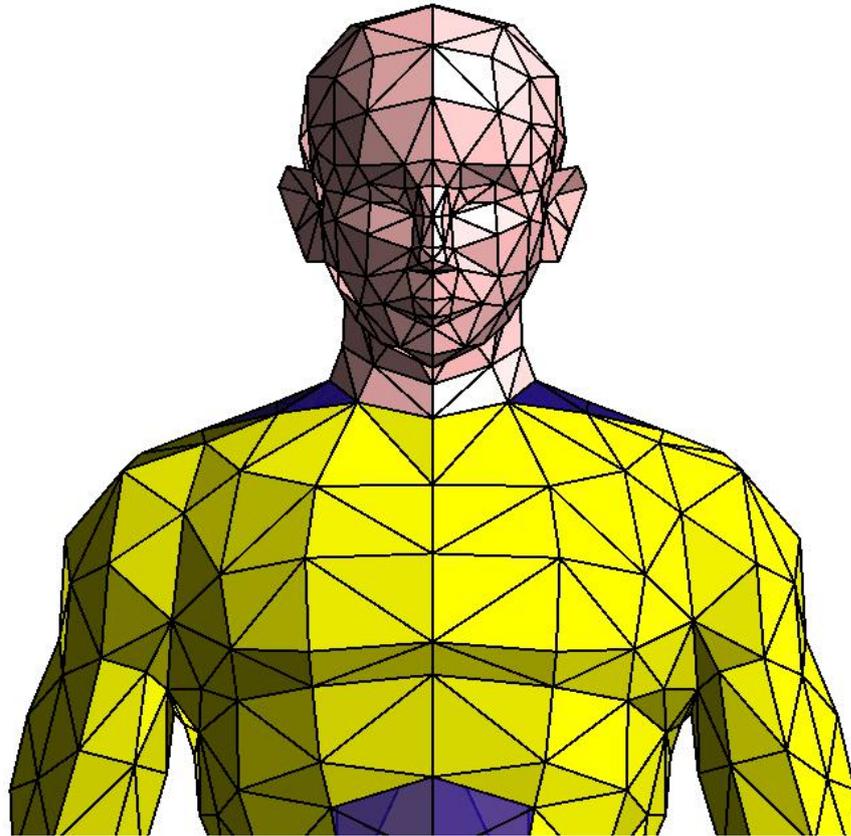


GEODESTIC SPHERE Using Dynamo and Adaptive Components

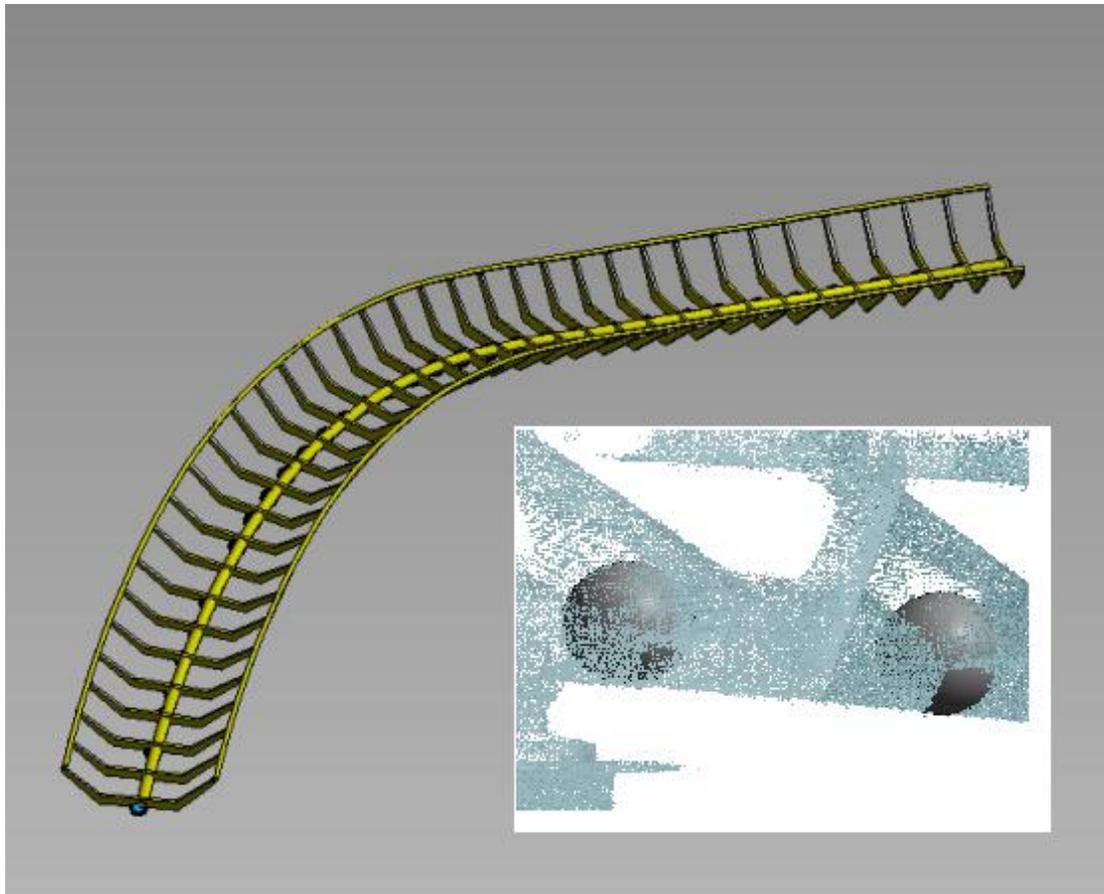
Revit is a single plane based modelling software so the only option for creating these sort of structure is using Adaptive component. Using adaptive component and creating these structures cannot give accuracy of work.so I decided to handle this task using Dynamo. First I created a geometric sphere and triangulated it using mathematical formulas and created the basic points and surfaces using dynamo and it was parametric to adjustable by diameter. Then I created a Adaptive family similar to a small Pyramid.I obtained the points from surface of the form sphere and then I handled the list of triangulated points and then removed repeated Points and placed a adaptive family on those points. I used various packages such as clockwork 0.7x ,Bakery etc. To complete the script.

This project was a milestone for my career towards dynamo. It saved huge time to my team and the result was also with accuracy and zero Warnings and “my Love” on dynamo “Doubled”.



.OBJ Mesh To Model in Revit

Revit is a Solid based modelling software you cant import any models made of mesh software into revit so I tried to import a .obj file in revit as a model which can be edited up to a extent in revit so it may save modeling time and also we can import various models into revit For this I imported a mesh or .obj using mesh package in Dynamo and I got surfaces from the model and then I triangulated it and inserted a adaptive family it was just a triangle surface with three adaptive points so that it fix to the triangles of the triangulated mesh It was the idea to convert point cloud data to mesh and then to model in revit .which saves time and human power instead of modelling architectural elements inside a building.it was also very use full but it takes time to develop this project to a new dimension



.OBJ Mesh To Model in Revit

This Project is for converting point cloud data of a roller coaster into a model so I decided to get center points of the Point cloud model and create a revit model with those Points

Here I created a sphere structure as family I adjusted the thickness to roller coasters center support as spheres diameter and I placed those families along the point cloud data

From that we got center point and travelling spline of the roller coaster Then placed into adaptive family and created the track as per model Points.

These points where very useful to complete the project and this thing made the task possible

Automated Pile modelling in Structure Steam

Created a Dynamo script for the process of placing piles from CAD input and Excel input it is saving time for all Projects in common Explored pile layout plan and filtered circles of pile and read inputs from excel and parameters where set and pile process was automated successfully with accuracy

Automated Skirting Placement in Architecture Stream

Created a script to the process of skirting according to the floor type it saves more time in Architecture stream

COBie Parameter update

Created a script to add COBie Parameters to the model of LOD500

Minor Task's

Used for number of minor task and Educated my team with knowledge transfer sessions

Understand-ed that "Dynamo is going to be the future of BIM " it saves lot of human Power and time .Hence invested a part of time in it and am started earning the "Wonderful returns" with in a "short time span"

