Reynolds – Scipy 2017 Submission

Description

Reynolds is a Blender-add on that provides a GUI for OpenFoam.

In this talk, I am going to demo the usage of this add on by solving a case using the laplacianFoam solver. After the demo, I will go over the reasoning to pick Blender, the design of this addon and the pros/cons of using Blender as a GUI tool for CFD using OpenFoam. We will also see how the design of this add-on allows easy addition of new solvers.

Major takeaways

1. How to use Blender in scientific visualization?

Talk Outline

Blender Intro and simple Add-on demo Reynolds Add-on Demo (cavity tutorial) Why Blender? Reynolds Design? Adding a new solver Pros/Cons of Blender for scientific visualization? Closing notes

PreRequisites

Good to have at least basic knowledge and usage of command line OpenFoam.

Reynolds Repositories

https://github.com/dmsurti/reynolds https://github.com/dmsurti/reynolds-blender

Speaker Info

I am a 3D software engineer specializing in 3D asset, game and scientific visualization applications. Author of AssimpKit & Reynolds and Mayavi contributor.

https://github.com/dmsurti