

GigaSpace Cache Mechanism

- ✦ **Voxel data type** : user can defined what's inside a voxel
 - ✦ list of types : uchar4 (ex: color), half4 (ex: normal)...
- ✦ **Producers** : fill the data structure
 - ✦ Node producer : fill spatial data structure
 - ✦ Brick producer : fill voxel data
 - ✦ either host or device, or a combination
 - ✦ based on user oracles
- ✦ **Shader** :
 - ✦ modify apperance by sampling data along rays

GigaVoxels Pipeline

Renderer

Shader

Visitor

Data Production
Manager

Producers
(nodes, bricks)

Data Structure

Cache Manager

- voxel (data types : color, normal...)
- octree, N3-tree, BSP...

USER
input

USER
output

Graphics
Library
interoperability

Graphics
Library
interoperability



