Data & Visualization Weekly Projects Report 2022_02_21

Active Projects

Active Development

- Sensor Lab Demo Package
- Blender on HPC workflow for GIS
  - Worked on converting PAG imagery into DTM's that can be rendered in Blender with this workflow
  - Apparently there is noise in the lidar data that causes the outputs to have null values written into the .tif image
  - Might need section of pipeline to address this
- Cyverse Field Scanner Vis Tool
  - One of Josh's PhD students is looking for a job, maybe he will be the DSI
- Kay He Exoplanets
- Kay He B2 Lung
- CATalyst data studio vis wall playlist
- Thermal Imaging Project
  - Got wonderful email from Ed that the tool has been doing great and that he wants to move to the other systems to use up the rest of his monthly allocations
  - They have processed the bulk of their video files already by the sounds of it
- Vulkan on HPC
  - Succeeded with getting vulkan to run on Darwin in Delaware
  - This was a useful step towards working out what is happening on the expanse systems because they have the same cards in their system
  - Got startup allocations on TACC resources and will start my testing there this week
- Streaming Technology for HPC
- Data Visualization Roadshow With Jeff Oliver and Kiri Carini
- Independent Study Abby Collier
  - Met and tried to work out methods to share with students related to exporting video from touch deigner
  - Tricky subject because the relation between network fps video fps and realtime on/off is quite complex
- Stellarscape Astronomy Multimedia Dance Performance
  - Met and had a photo shoot for sxsw and other events that might require photo material for advertising
  - Figured out how to control a touch designer system from a browser running on a different system using an ipad, this is how the live demo/installation is going to work
- Virtual Nature

- recorded a video for Omani thathow to do basic point cloud creation
- Experimented trying to load the data from the biosphere project into godot without much success

Consultations

- Word Cloud Visualization
  - Met with Teodora Stoica and worked on a visualization for her paper that lays out word frequency in a word cloud as a way to capture differences in vocabulary between two age groups of participants
  - Will be meeting again to revise this in the week
- Erin Choi Brain modeling visualization
  - Met with Erin and walked through how to import a model out of sketch fab to put into her printing tool tinker cad
  - Sent emails off to Dianne to connect Erin with the Brain Modeling Crowd, as well as the Brain bus for outreach
- Visit remote visualization support
  - Found issue that might be why 3.2.1 has been having trouble when 3.1.4 didn't

Upcoming

- TURN UP Festival Performance NYU/UA collab
- Volumetric Capture processing on HPC
- Has Faculty Collaborations With Holodeck
- Ray Tracing On The Hpc
- Observablehq Portfolio Of Data Visualization
- Jason Hortin Holographic Dance Graduate Project

Completed For Calendar Year

Recently Completed

- Marcos Serafim Touch Designer visualization of audio file as video data bending

Workshops/Trainings

Completed Projects/Collaborations

- Marcos Serafim Touch Designer visualization of audio file as video data bending

Completed Consultations

- Martha Bhattacharya Cytoscape installation

Infrastructure Developed

Protocols and Analysis Developed