Data & Visualization Weekly Projects Report 2021_09_10

Active Projects

Active Development

- IEEE Satellite Vis Conference Planning
  - Spent 2 hours in meeting working out details related to the location reservations for the conference as well as community planning steps
  - Volunteered to create the Birds of a Feather (BOF) sign up sheet with Google's AppSheet https://www.appsheet.com/start/7e25f1d2-e9a4-4eec-a31a-5edd275f3059
  - Also volunteered to be the main person at the information table during the conference helping folks identify which vis experts their questions are best suited for
- Vulkan on HPC
  - Reading section on windowless rendering from https://sotrh.github.io/learn-wgpu/showcase/windowless/
  - Hopefully this will make it possible to run simulations steps faster than the x11 can forward and then stitch the png results together in a movie file
- Streaming Technology for HPC
- Data Visualization Roadshow With Jeff Oliver
  - Setup two new presentations for the fall so the remaining total is 5
  - First new presentation is for Special Libraries Association (SLA) and their Science Technology Community sub group
  - Second is the Math department Research Training Group (RTG) with Laura Miller and Kevin Lin
  - Had a debrief session from last presentation and we are going to do a bottom to top overhaul of the presentation for the ENVS presentation on the 27th
- Independent Study Abby Collier
  - Met with Abby and worked on the 3rd effect from the performance's movement 1a
  - Left it on a note where I described 5 modifications of varying difficulty that she could investigate
- Stellarscape Astronomy Multimedia Dance Performance
  - Had meeting with Kay and worked on the time codes for the 1a and 2a sections
  - Got positive feedback on many of the changes that I had incorporated since the tech test on the 2nd of September
- Virtual Nature
  - Made video upload for Omani showing how we will take model data in the `.ply` format and make it visible in Touch Designer using a glsl compute shader

- Radiology 1St Year Resident Carl Sabotke

Consultations

Upcoming

- Has Faculty Collaborations With Holodeck
- Observablehq Portfolio Of Data Visualization
- Ray Tracing On The Hpc

Completed For Fiscal Year

Recently Completed

Workshops/Trainings

- Mt. Lemmon In Your Pocket-Creating A Virtual Reality Tour
    - https://rtdatavis.github.io/#GIS_week2020
- Presentation For Civil Engineering Department
    - https://docs.google.com/presentation/d/15Z9zcxU4vIIgFPnKEcaGv9GH7JtjNdx4Xpnjec0EzEc/edit
- Resbaz Organizer And Workshop Provider
    - https://hackmd.io/-XS5Mqh8TA2EHjTHCQ_4tw
- Tech Core Level Up Presentation Monday, Sept 28 2020
    - https://rtdatavis.github.io/#techcoresept28
- Tech Core Level Up Presentation Tuesday, Mar 17 2020
    - https://rtdatavis.github.io/#techcoremar20
- Womens Hackathon: Visualization On The Web Workshop
    - https://womenshackathon.arizona.edu/
    - https://www.youtube.com/channel/UCe1YiJ53o3qcayVs4cipeXA/videos
    - https://www.youtube.com/watch?v=VLwPOtqW8oM

Completed Projects/Collaborations

- Collaboration With Techcore'S Summer Internship
    - https://hackmd.io/xi_m4Kj6QDenBR3ZAfN3iw?edit
    - {'Project folder on gdrive': 'https://drive.google.com/drive/folders/13v9QfUFVjQD-x7dh8chQZFvAxmy5zmx6?usp=sharing'}
    - {'videos': 'https://drive.google.com/drive/folders/18tT28oLiXFH1wH8NGUwSU1K0URyzJq9o?usp=
    - {'Pecha Kucha style presentation': 'https://docs.google.com/presentation/d/1n6ggKJ-oG7fqHfVsLMnuYkAVh095B1RA7EcNx1RQ12M/edit?usp=sharing'}
    - {'presentation video': 'https://www.youtube.com/watch?v=EiQ9S5lNbA8'}
- 3D & Vr Retrofit Azlive
    - https://rtdatavis.github.io/#retrofitAZLIVE
- Bio5 Virtual Reality Tour
    - https://rtdatavis.github.io/#bio5-vr-tour
- Covid Retail Mitigation Web Scraping
    - https://rtdatavis.github.io/#retailscraping
- Force Directed Biochem Networks

- – https://rtdatavis.github.io/#biochem-networks
- Migrant Forensic Empathy Project: A Digital Borderlands Grant Initiative
  - – https://mfemigrantdeathmap.baylyd.repl.co/
  - – https://devinbayly.github.io/digital_borderlands_conversion/src/mesh_test.html
  - – https://devinbayly.github.io/digital_borderlands_conversion/src/index.html
  - – https://hackmd.io/Qo_HmwmwSTG-QPYVTJl0Lg?view
  - – https://osf.io/v9swc
- Neuro Choropleth
  - – https://rtdatavis.github.io/#neuro-choro
- Oyster Vibrio Literature Review
  - – TBA
- Spring Break Covid Photo Maps
  - – https://rtdatavis.github.io/#spring-break-covid

Completed Consultations

- Discussion about Social Network Analysis Visualizations
  - – NA
- Advice For Thesis Defense Visualizations, Sabrina Nardin
  - – NA
- Bryan Carter Photogrammetry
  - – https://sketchfab.com/3d-models/churche-maze-photogrammetry-d0767af08a5d498fb960efe3ac83385f
  - – https://drive.google.com/file/d/11E5_912vW6kuPBxcujGKs-UQD9S3jA-H/view?usp=sharing

Infrastructure Developed

- Remote Visualization Infrastructure Development spring 2021
- Autamus Web Interface
  - – https://rtdatavis.github.io/#autamus_interface
- Virtualgl For Nvidia Accelerated Remote Hpc Visualizations
  - – https://rtdatavis.github.io/#virtualgl
- Xpra And Singularity For Comprehensive Graphical Application Support On Hpc
  - – https://rtdatavis.github.io/#xprasingularity

Protocols and Analysis Developed