

Exercise Week 10 | Visualization (AY 119 BPP 2020)

A. NUMPY to CSV

- ❖ Download the data associated with the first lecture from the AY119 site (dsfp_ztf_feats.npy).
- ❖ Load the data into python (remember to import numpy).
- ❖ Create a string header line that has a name for each column in the dataset, separated by a comma
- ❖ Save the data as a CSV (use savetxt, with a comma delimiter, and the string header created above)

B. PARAVIEW

- ❖ Download Paraview from paraview.org
- ❖ Launch Paraview
- ❖ Open your csv file
HINT: after you “open” the csv file, be sure to press Apply on the Properties panel
- ❖ Find the “Table to Points” filter in the filter menu, and select it.
HINT: make sure your data file is selected on the pipeline browser
- ❖ In the Properties panel for “Table to Points” select an X Column, Y Column, and Z Column you feel were representative from previous work. Press Apply to apply the conversion. HINT: you might want to have “Keep All Data Arrays” checked so that you carry the other data along
- ❖ Find the “Glyph” filter in the filter menu, and select it.
HINT: make sure “TableToPoints1” is selected on the pipeline browser,
- ❖ In the “Glyph” Properties panel, choose a Glyph Type, find the Radius property and choose a value, and find the Masking section, and under Glyph Mode select “All Points”. Press Apply to apply the generate glyphs.
HINT: above the 3D Viewer, you might need to click the “Reset” View Extends, to view your results (icon that looks like arrows pointing to four corners).
- ❖ Play with the radius, columns, glyph, coloring, orientation, and **submit a screenshot of your results.**