

CIS 4930/6930-902: Scientific Visualization (Fall 2015)

Project 3: Visualizing Data with Processing

Overview: This assignment will familiarize you with the Java-based visualization package Processing.

Objectives: The goals of the assignment are for you to learn the capabilities provided by Processing, implement an interactive visualization, and complete your visualization “story”.

Ground Rules: This assignment is intended to be done alone. You may ask others for help with using Processing or for feedback on your visualization choices. However, the write-up and its ideas should be developed by you.

Assignment:

1. Download the Processing package (<http://www.processing.org>)
2. Gain familiarity with the package capabilities by exploring the available examples (<http://processing.org/examples/>) and tutorials (<http://processing.org/tutorials/>).
3. For this part, you MUST continue using your data and work from Project 2. Once again, reevaluate the success/interest/depth of your questions from Project 2 (revisit Munzner’s Nested Model, visual encodings, etc.). Implement one (1) interactive visualization based upon your prior work to help explain your story. This visualization must use at least 1 technique from the “Tasks & Interaction” or “Views & Focus+Context” lectures.
4. Revise and complete your NY Times style data story (for example: <http://www.nytimes.com/interactive/2015/09/04/world/europe/europe-refugee-distribution.html>). This should consist of any combination of the visualizations from Project 1, 2, and 3 (project 3 visualization must be included). Again, the story will need to explain the context of the data, the visualizations, and guide the reader’s analysis. Remember, the goal is to have a story you can show your friends, spouse, parents, etc.

Submission: Please submit the document and code in a zip file on Canvas by the start of class on the due date. Your document can be in html or pdf format and has no length requirement.

Grading: Because this work is difficult to objectively grade, your performance is graded relative to your peers. Submissions will be ranked best to worst (based upon quality of work, difficulty of technique, application of class topics, etc.) and assigned a grade based upon that ranking.