Memory Check

Runtime Calculation

Visualization

Build Data Structure

Comparative Evaluation (qualitative):

Advantages and disadvantages of different data structures

Horizontal Comparison between Visualizations: R-Tree (more physical space in the cube) vs. Octree (flowers) vs. K-D Tree (taking up all spaces)

Memory Used

Colored Pixel vs. Blank Pixel

Runtime

Comparative Evaluation (Quantitative):

NetworkX, NumPy, Matplotlib, Gephi, time, memory-profiler

Testing: Memory Used

Testing: Program running time of each visualization

Input Pre-segmented point cloud (i.e., pole, house, tree)

Visualization of Octree, K-D Tree, R-Tree