**Automating Algorithm Operation Visualization**

**Introduction**

Computer algorithms are the basis for how we tell computers how to solve problems. Algorithms describe the series of steps a program must take to complete a certain task. This includes checking for certain conditions and performing actions based on those conditions.

When designing computer algorithms, having the ability to visualize how they operate can be extremely valuable. Visualization can allow one to see why an algorithm behaves in a particular manner when given a specific input. Visualization can also show the overall efficiency of an algorithm, giving designers ideas of things that could be changed to improve this efficiency. Having the ability to automate the visualization process can be extremely useful in algorithm development by showing designers ways in which algorithms could be changed to increase efficiency.

**Sorting Algorithms**