

Evaluation of Data Collected Using The Fitts's Law Testing Program

According to Fitts's Law as the size of a target decreases and the distance increases, the time it takes to reach the target increases. Data collected from the program are displayed below as an overlaid series of marker-connected scatter plots. The first chart –displayed below- is from a trial conducted shortly after development to test functionality. It can be seen that Fitts's law applies here.

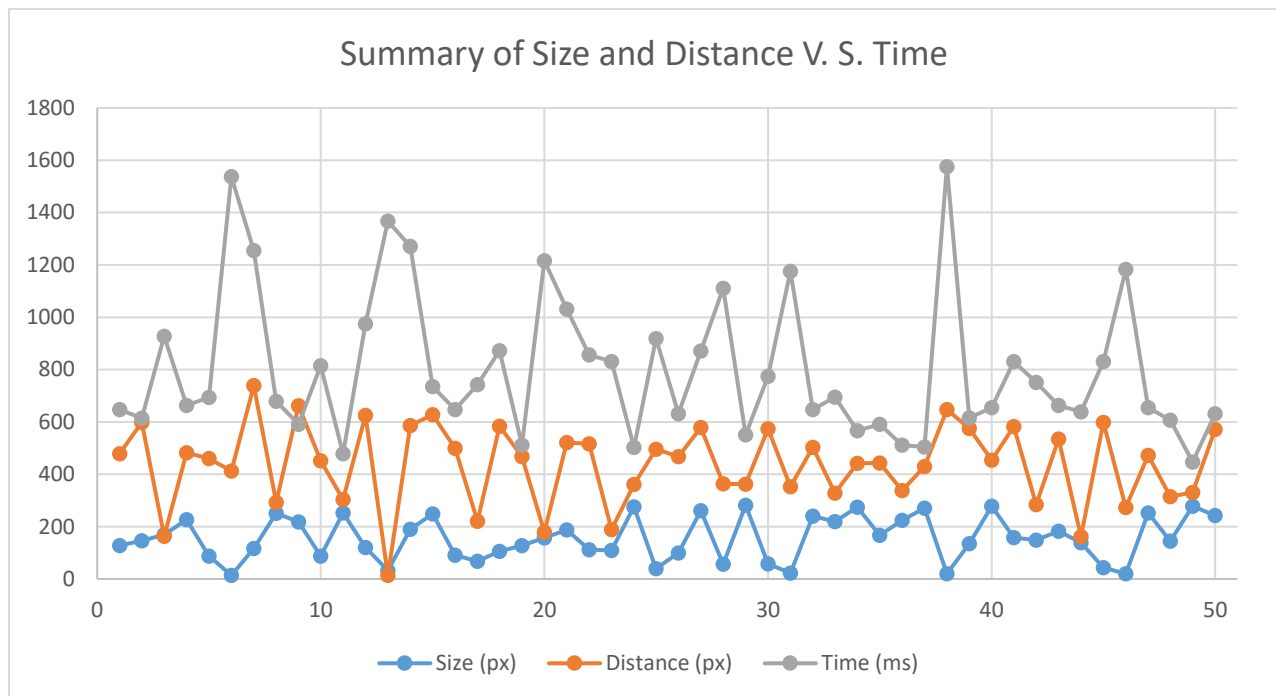


Figure 1: Initial Functionality Testing

The seventh data point –one of the highest times in the set- stems from a large distance and a small size. Another data point – the thirty-eighth- stems from the same trend. As the distance spikes, the size is very small, or the distance is very large, or both. There is a trend from data points forty to forty-four where this seems to not apply but this can be explained as the points are in close enough distance for the data to be invalid. Another observation is the thirteenth data point where the size is incredibly small but the distance is incredibly small as well yet this data point provides one of the highest reaction times in the sequence.

The second chart –displayed below- is from a test conducted with a third party in order to ascertain more reliable data to use in this analysis. This data has a much more representative distribution of Fitts's law with much more variability to better view the differences in data points. The distribution also has many of the proving data points –points where the distance is large and the size is small- that perfectly illustrate Fitts's law. This chart is presented below for analysis and evaluation.

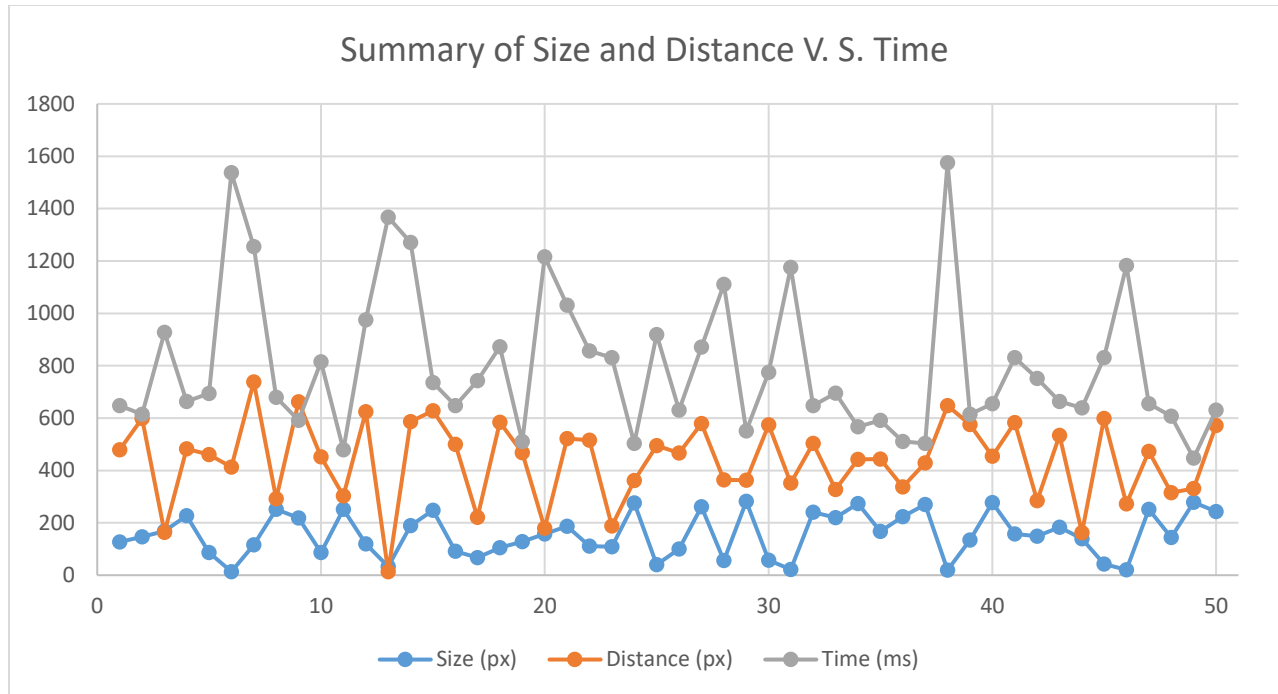


Figure 2: Testing With a Third Party