

ENPM809T - Autonomous Robots

Homework 3

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https://github.com/ShonBC/ENPM_809T_Autonomous_Robots/tree/master/Homework_3

Youtube Link:

<https://youtu.be/wzkTWeDuGO4>

Raspberry Pi Object Tracking Processing Time Analysis:

When looking at the Pi's processing times for each frame there was a large spike in processing time for the first few frames. This skews the resolution of the rest of the plots. For the sake of comparison, Figure 1 and Figure 2 show the plot and histogram of the unprocessed data.

Figures 3 and 4 show the plot and histogram with the first 5 data points removed to show how the Pi performed once it is in its steady operational state in more detail.

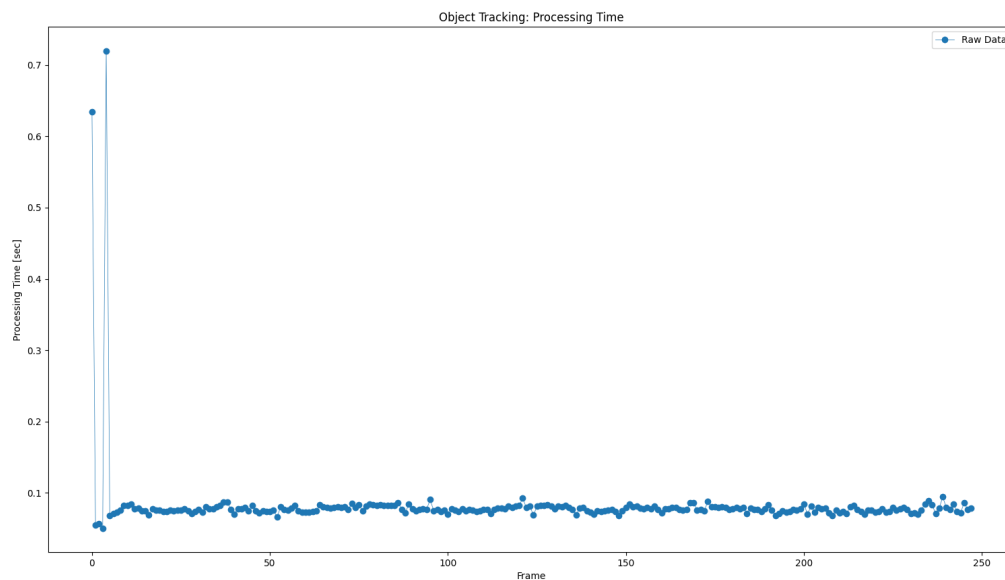


Figure 1: Plot of unprocessed data showing the processing time for each frame.

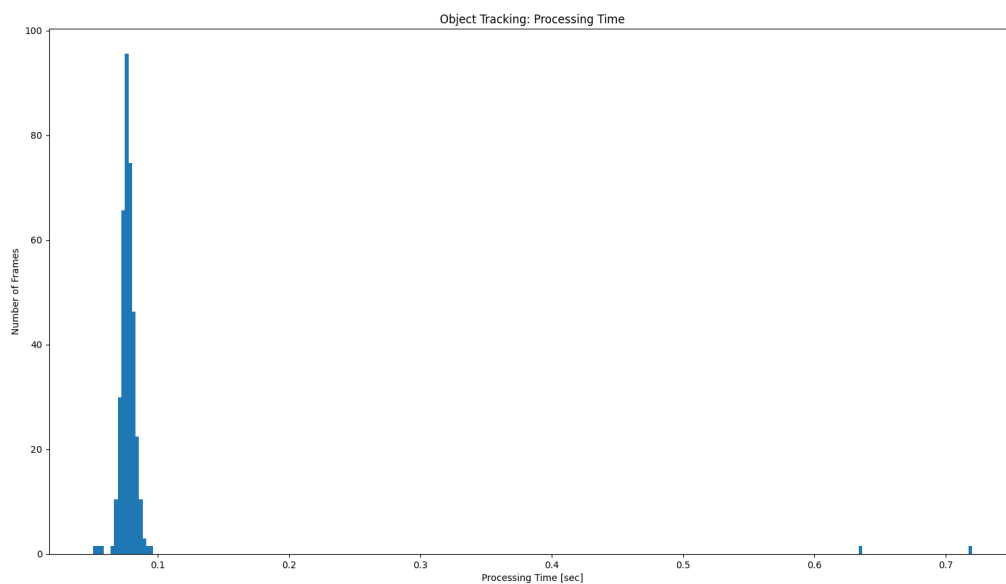


Figure 2: Histogram of unprocessed data showing the grouping of processing time for each frame.

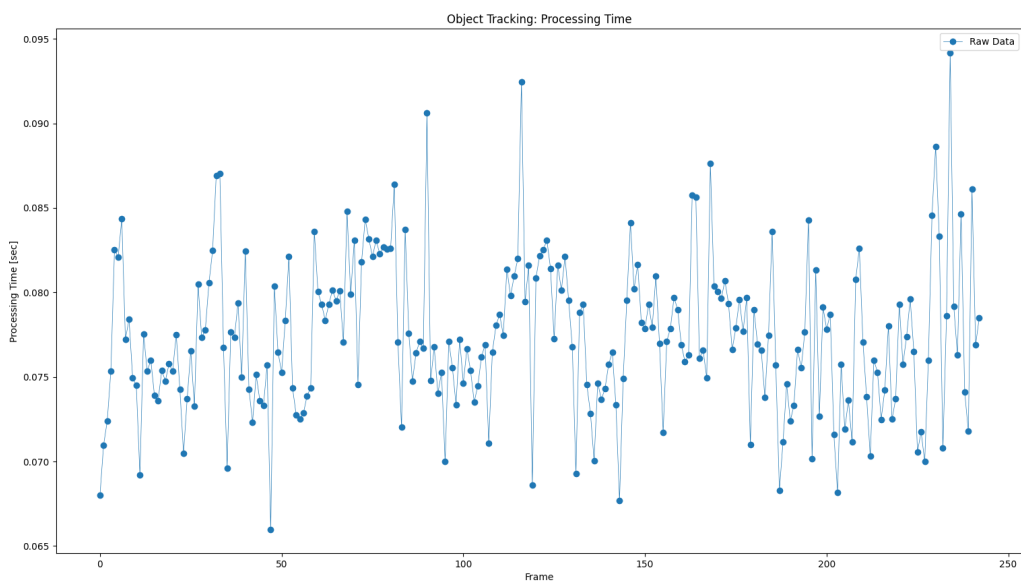


Figure 3: Plot of processed data showing the processing time for each frame.

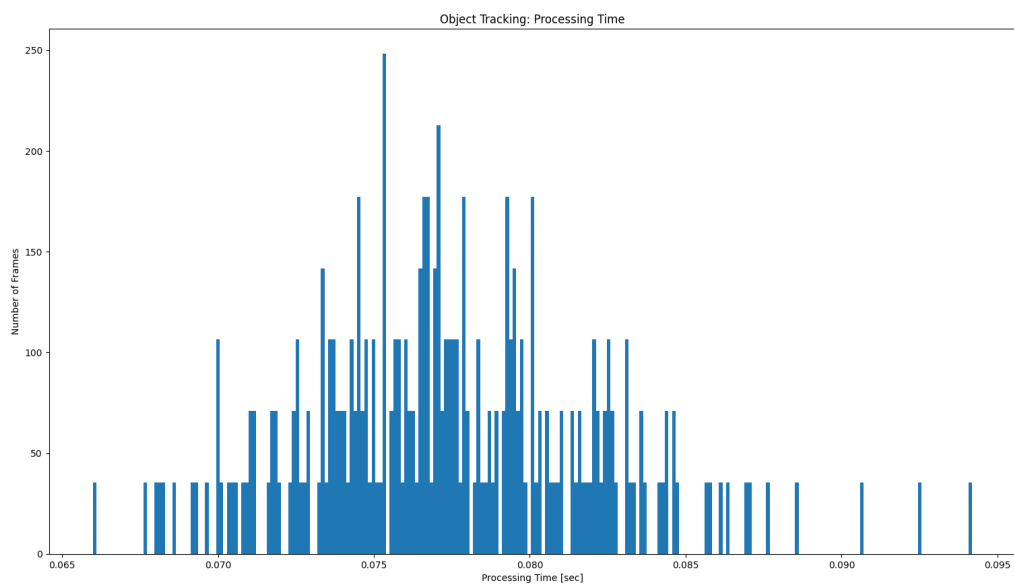


Figure 4: Histogram of processed data showing the grouping of processing time for each frame.