University of Waterloo

Faculty of Engineering

Department Of Electrical And Computer Engineering

ECE 254

Laboratory 3

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Average Time and Standard Deviation

Average times were used to make more accurate conclusions. This is because if a single output of the program was used for comparison, there could be a multitude of factors that result in erroneous answers. Running the program 500 times with the same input and taking the average results in a much more accurate representation of how the processes or threads are working. Averaging removes any outlining erroneous values that could be caused by externalities outside of our control and provide more accurate data. Standard deviation is calculated to show how consistent our data is. This

Advantages and Disadvantages of Threads and Processes

Affect of Number of Items Produced

Affect of Buffer Size

Affect of Number of Producers

Affect of Number of Consumers