

# **Parallel Text Pattern matching**

## **Team members**

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## **Abstract**

Pattern matching is a highly computationally intensive operation used in a large number of applications. Unfortunately, due to the ever increasing storage capacity and link speeds, the amount of data that needs to be matched against a given set of patterns is growing rapidly. I aim to solve this problem by designing, implementing, and evaluating pattern matching using the GPU, which can be used transparently by a wide range of applications to increase their overall performance.

I would perform pattern matching by parallelly using the cores of GPU. Each core would perform operations separately for the assigned task and then the pattern matching results from all the cores of GPU would be returned to the user. The results would then be used to analyse the performance of parallel text pattern matching.