Computação em Larga Escala

(ano letivo 2024'25)

4 - CUDA Exercises

CUDA is NVIDIA's parallel computing platform and programming model that enables dramatic increases in computing performance by harnessing the power of their graphics processing units (GPUs).

4.1 - Crypt CUDA

Study the cryptCuda.cu program and determine its optimal execution configuration.

4.2 - Matrix Product

Write a program to compute the product of two square matrices with 1024×1024 elements. The computation should be performed on both the CPU and the GPU, and their respective execution times compared. For the GPU computation, determine the optimal execution configuration.