

INF-3201 Parallel Programming – GPGPU

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I. INTRODUCTION

The goal of this assignment is to parallelize the given piece of code with **CUDA/OpenCL** and multiprocessing (combined).

A. Requirements

- Parallelize an encrypt/decrypt code
- Parallelize it with CUDA/OpenCL
- Evaluate speedup

II. TECHNICAL BACKGROUND

- Concurrency and parallelism concepts
- Parallel programming concepts
- Basic programming approach
- Notion of GPU programming approach
- Knowledge of C language
- Knowledge of Python language
- Notion of design pattern principles
- Theory about software engineering
- Knowledge of git to manage the software versions

III. ANALYSIS

IV. IMPLEMENTATION

V. RESULT AND BENCHMARKING

VI. DISCUSSION

VII. CONCLUSION