LAB 01: CONCORRÊNCIA E PARALELISMO (11158)

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I'm Alex, a Professor Auxiliar in the department since February 2023

I'm from the United Kingdom originally

Previously, I worked as a cryptography researcher in the technology industry

I do research in the area of developing practical Internet protocols with privacy-preserving properties

INTRODUCTION TO ME

Aims:

To learn the fundamentals of writing and developing algorithms/programs that make use of parallel programming techniques

Labs:

Experiment with technologies and frameworks that allow us to build parallel programs.

Intended outcomes:

1. To be able to analyse and identify situations in which programs could benefit from parallelism and concurrency.
2. To be able to scientifically reason about how parallelism has impacted performance.

- For ∼eight[1] weeks, you will be given an assignment on a new theme to complete.
  - The assignments are **not graded**, and are intended only to develop your understanding.
- In the remaining weeks, you will working on a **graded** project to complete.
  - The project task will use the same principles and methods that will be used in completing each of the assignments.
- Every week, I will be here to help with questions, problems, and anything else.

[1] Exact number may change.

STRUCTURE OF LABS

https://aulas.alxdavids.xyz/pergunta/qa85a46

A QUICK QUESTION...

To run a Monte Carlo simulation to estimate the value of π.

- Assignment PDF: https://github.com/MEI-CP/lab-assignments/
- The assignment will first introduce you to using `git` and `GitHub`
- After that, you will proceed with the main task

Remember: **git** and **GitHub** are your friends.

TODAY'S LAB TASK

https://aulas.alxdavids.xyz/pergunta/q7fe705

https://aulas.alxdavids.xyz/pergunta/q802b72

Don't worry if you didn't reach a complete solution

Next week we will be working on the same problem but using C

The principles you applied here will still be valid

My office hours are `14:00-16:30` on Tuesdays

See you next week!