



INSTITUT
POLYTECHNIQUE
DE PARIS

CSC5001 - High Performance Systems

Elisabeth Brunet



CSC5001 - Objectives

- Dive in parallel programming environments
 - OpenMP, MPI, CUDA
 - targeting Multi-core, Cluster, heterogeneous CPU+GPU architectures
- Design an efficient parallel application from its sequential version
 - } Parallelize program
 - } Enhance data locality
 - } Initiate a scientific approach to optimize your code
 - Observe, analyze, understand program execution

- Courses

- 
- Institut Mines-Télécom

CSC5001 - Project

- The Game of Life
 - } Simulation of the evolution of a cellular automaton
- By group of two students
- Source code repository on TSP gitlabense + report
- Due date : 29/10/2025
- Notation
 - } Code + report + defense 03/11/2025



CSC5001 - Teaching team

- Elisabeth Brunet
 - François Trahay
- `first.lastname@telecom-sudparis.eu`



CSC5001 - Teaching team

- Elisabeth Brunet
 - François Trahay
- first.lastname@telecom-sudparis.eu

Welcome and have fun !