Parallelism in CS in Spain

Our proposal

Par
Conc+Dist
Distrib.
Par
Tools
Algor.

University of Granada

First semester
Second semester
Third semester
Fourth semester
Fifth semester
Sixth semester
Specialization
Par
Conc
枫
Par
Conc
枫

University of La Laguna

First semester
Second semester
Third semester
Fourth semester
Fifth semester
Sixth semester
Specialization
Par
Conc
枫

University of Murcia

First semester
Second semester
Third semester
Fourth semester
Fifth semester
Sixth semester
Specialization
Par
Conc
枫

Polytechnic University of Valencia

First semester
Second semester
Third semester
Fourth semester
Fifth semester
Sixth semester
Specialization
Par
Conc
枫

Topics of the Curriculum Initiative PDC in the Spanish system

Figures represent to what extent each topic is treated in common courses. Green means it is a core topic, yellow is for non-core topics, and red is for a topic not treated. For non-core topics the specializations where the topic is studied more in depth are indicated. In the proposal the topic should be core in those specialities, and for each university the topic is considered as core (C) or non-core (N). Clearly, the figures represent only an approximation to the reality because how deep a topic is treated depends on a set of factors, but the schemes have been produced from the study plans of the universities, which are now in the first or second year of implantation.

ARCHITECTURE

Proposal
Ganada
La Laguna
Murcia
Valencia

Proposal
Granada
La Laguna
Murcia
Valencia

Programing
SIMD
Shared memory
N-CE
N-SE
C-CE
C-SE

Performance monitoring
N-CE
N-CE
C-CE
C-SE

Data parallel
SPMD
Parallel loop
Array languages
Shared memory notations
SPMD notations
Swarm CE and correctness
Synchronization
Concurrency defects
Performance computation
Performance data
Performance monitoring
N-CE
N-CE
C-CE
C-SE

ALGORITHM

Proposal
Ganada
La Laguna
Murcia
Valencia

Graph algorithms
Specialized computations
CROSS CUTTING

Why and what paral.
Concurrency
Non-determinism
Power
Locality
Cluster
Cloud/grid
FP
Fault tolerance
Security
Distributed transactions
Web search
Social networking
Collaborative comp.
Web services
Pervasive computing
Mobile computing

N-CE
N-SE
C-CE
C-SE

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