Topics in Parallel and Distributed Computing: Introducing Concurrency in Undergraduate Courses

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Topics in Parallel and Distributed Computing provides resources and guidance for those learning PDC as well as those teaching students new to the discipline.

The pervasiveness of computing devices containing multicore CPUs and GPUs, including home and office PCs, laptops, and mobile devices, is making even common users dependent on parallel processing. Certainly, it is no longer sufficient for even basic programmers to acquire only the traditional sequential programming skills. The preceding trends point to the need for imparting a broad-based skill set in PDC technology.

However, the rapid changes in computing hardware platforms and devices, languages, supporting programming environments, and research advances, poses a challenge both for newcomers and seasoned computer scientists.

This edited collection has been developed over the past several years in conjunction with the IEEE technical committee on parallel processing (TCPP), which held several workshops and discussions on learning parallel computing and integrating parallel concepts into courses throughout computer science curricula.

- Contributed and developed by the leading minds in parallel computing research and instruction
- Provides resources and guidance for those learning PDC as well as those teaching students new to the discipline
- Succinctly addresses a range of parallel and distributed computing topics
- Pedagogically designed to ensure understanding by experienced engineers and newcomers
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Editorial Review

Review
"Providing practical assistance for adding parallel programming at an early stage to undergraduate students in computer science is the aim of this book." **--Computing Reviews**

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