

Possible topics for Projects

Benchmarking on parallel machines

Scheduling for Heterogeneous System Management

Parallel Image Processing Algorithms

Parallel Data Mining

Parallel Video Compression

Parallel Bioinformatics

Computational Fluid Dynamics Problems

Matrix or Linear Equation Solvers

Static Scheduling for Executing Task Graphs on Multiprocessors

Power aware distributed and parallel computing

Load Balancing for Parallel and Distributed Systems

Data Replication in Distributed Systems

Parallel Branch and Bound Algorithms

Scheduling in Multicore processors

Parallel AI Algorithms

Temperature-aware Scheduling

Energy-aware high-performance Computers in Data Centers

Emerging Parallel Applications in Science, Physics and other Fields

Sources of Information

Journals and Conferences:

- *IEEE Transactions on Parallel and Distributed Systems*, a research journal published by IEEE Computer Society.
- *IEEE Transactions on Computers*, a research journal published by IEEE Computer Society.
- *Journal of Parallel and Distributed Computing (JPDC)*, the very first journal devoted to this area, published by Academic Press, Inc.
- IEEE Distributed Systems online
- www.citeseer.com
- *Journal of Supercomputing*, an international journal on parallel computers and their programming and applications, published by Academic Press.
- *Parallel Computing*, an international journal on parallel computers and their programming and applications, published by Elsevier Science.
- *Cluster Computing*.
- *IEEE Concurrency (Old name: Parallel and Distributed Technology)*, a dedicated magazine specialized in applications of parallel computers, published first as *IEEE Parallel and Distributed Technology* since 1993.
- *IEEE Computer Magazine*, a general magazine for all subgroups of the IEEE Computer Society. This magazine often carries special issues that are related to parallelism or networking.
- *Communication of The ACM*, a general magazine for all subgroups of the Association for Computing Machinery.
- *International Conference on Parallel Processing (ICPP)*
- *International Parallel Processing Symposium (IPPS)*, an annual symposium sponsored by the IEEE/Computer Society Technical Committee on Parallel Processing.
- *International on Distributed Computing Systems*, a conference organized by IEEE.
- *Supercomputing*, a conference on high-performance computing organized by ACM and IEEE

Online Sources

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