Abstract
Parallel computers have recently become powerful enough to outperform conventional vector based supercomputers. Several parallel languages are currently under development for exploiting the data and/or task parallelism available in the applications. In this paper, the authors propose the development of a public domain infrastructure to provide runtime support for high level parallel languages.
Exploiting Domain-Specific High-level Runtime Support for Parallel Code Generation. Xiaogang Li, Ruoming Jin, Gagan Agrawal. Department of Computer and Information Sciences, Ohio State University.

Motivation. Languages, compilers, and runtime systems for high-end computing.

Slideshow... Performance modeling and prediction (for parallelization strategy selection) SIGMETRICS 2002. Runtime and compiler support for shared memory parallelization (LCPC 02). Translation from mining operators (not yet). Focus on language and compiler support for distributed memory parallelization in this talk. Common Processing Structure. Structure of Common Data Mining Algorithms. (* Outer Sequential Loop *). While ( ). The Consortium includes several leading research groups working on parallel runtime systems and compilers. Most partners brought into the project pre-existing software for run-time management of communication and computation in data parallel languages. Such libraries have disparate representations of distributed data, but all provide methods for partitioning and accessing array elements or remapping arrays. They all make some optimizations for reducing data movement costs, such as message-blocking, collective data movement, message coallescing, aggregation, and so on. In the course of the pro