Accelerators to Applications

Algorithms Materials Outline

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This document describes the materials created for integration of parallel concepts into an Analysis of Algorithms course. All material here was developed under the Accelerators to Applications project. This material will be used in Comp 275 at Wittenberg University in the fall semester of 2011. The contents are in subdirectories corresponding to two main categories:

- Lessons - These are in-class lessons that are designed to cover theoretical parallel processing concepts as well as give high-level descriptions of algorithms using multiple processors. One of the lessons includes instruction in the Chapel programming language.
- Examples - These programmed examples demonstrate multiprocessing solutions to programming projects. Most of the examples are extensions of classical serial problems. The programs are written in Chapel (version 1.3) (see `http://chapel.cray.com` for more information) which has simple, built-in functionality for multiprocessing. This allows the code to focus on the algorithm design instead of specific thread-enabling syntax.

The subfolder of each of the two categories contains a summary of those resources.