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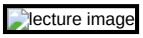

Special Guest Lectures

The Eclipse Parallel Tools Platform Project

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Johnston Hall 338
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Abstract:
A large number of tools are already available to aid in the development of parallel scientific applications, yet many developers are unaware they exist, do not have access to them, or find them too difficult to use. Unlike the wider software development community where the use of integrated development environments is best practice, parallel software development languishes with the lowest common denominator of command-line tools and Emacs style editors. By harnessing the power and flexibility of the phenomenally successful Eclipse framework, we have developed a platform for the integration of parallel tools that aims to provide a robust, portable, and scalable parallel development environment for the development of high performance scientific computing applications. We provide an overview of the Eclipse Parallel Tools Platform (PTP) project including tools for parallel application development, execution, monitoring, and debugging. With the growing interest in PTP we look at areas for collaboration, extension, and integration.

Speaker's Bio:
Nathan received a BS, MS, and Ph.D. from Clemson University in Computer Engineering, specializing in high performance computing. His doctoral work involved Coven, a custom component-based problem solving environment that through its design could perform several automatic optimizations of parallel codes. In 2004 Nathan graduated and joined Los Alamos National Laboratory where, among other things, he has worked on Eclipse, the popular integrated development environment. Nathan is an official Eclipse contributer and has been a major designer and developer of the Parallel Tools Platform (PTP) project which expands Eclipse support to parallel application development, launch, monitoring, and debugging.

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