The Department of Computer Science University of Nevada, Reno

cordially invites you to a Master's colloquium

A Parallel Queueing System for Computationally Intensive Problems on Medium to Large Beowulf Clusters

A professional paper submitted in partial fulfillment of the requirements for the degree of Master of Science with a major in Computer Engineering.

by

Sean Christopher Martin

Abstract: Large groups of networked workstations, commonly referred to as Beowulf clusters, require a systematic approach to load balancing. Many applications require extensive message passing and synchronization to take full advantage of the available processing power. We have endeavored to simplify this task by developing a generic queuing system that can be adapted to different applications. This system is particularly suited to graph theory problems, many of which require a high ratio of computation to message passing. We have used the queuing system to solve a common graph theory problem, finding the Minimum Crossing Number of a complete graph.

4:00 pm, Friday, December 5, 2003

Room 261, Srcrugham Engineering and Mines (SEM)

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