



**SDSU**  
presents  
a thesis defense for  
Master of Science  
degree in  
Computer Science

Thursday,  
October 25, 2012

3:00pm  
GMCS 405

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*Adaptive Content Replication in Peer to Peer Networks*

## Abstract

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Peer to Peer Network has seen a tremendous growth over the last decade due to its usage in the field of data sharing applications. Have we ever wondered how much time and resources are being utilized when we request for a data to the server and server to reply back with the result. The complete process is expensive for Peer to Peer Network when many entities request for data at a particular time. We tried to bring a concept of Content Replication in Peer to Peer network, that can provide content to the requester without the request being sent to the server and data can come from the nearest data source which contains the replicated data. The research brings a detailed overview on Peer to Peer Network and the process for Content replication in a small scaled Peer to Peer Network. We bring a Content replication Algorithm along with server selection algorithm that provides a workflow in the Peer to Peer Network for data replication and ease to end user to fetch the requested data without overloading the existing server operations.

## Thesis Committee

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Joseph Lewis, Thesis Chair, Department of Computer Science  
Tao Xie, Department of Computer Science  
Carlos Bazan, Department of Computational Science