

UNIVERSITY OF SOUTH FLORIDA

Defense of a Master's Thesis

*MsSpark: Implementation of Molecular
Simulation queries using Apache Spark*

by
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For the MSCS degree in Computer Science & Engineering

Huge amount of data is being generated in almost every field and it cannot be avoided, rather is essential for the advancement of the field. Analysis of this data requires intensive computing power. Molecular Simulation is a powerful tool for understanding the behavior of natural systems. The simulation generates large amount data while observing the spatial and temporal relationships. The challenge is to handle the analytical queries that are often compute intensive. Although various tools exist to tackle this problem, but in this paper we have tried an alternate approach that uses Apache Spark- a modern big data platform – to parallelize the computation of analytical queries.

05/30/2016

11:30am

ENB 313

THE PUBLIC IS INVITED

Examining Committee

Dr. Yicheng Tu, Ph.D., Major Professor

Dr. Sagar Pandit, Ph.D.

Dr. Yan Zhang, Ph.D.

Robert Bishop, Ph.D.
Dean, College of Engineering

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