

# UNIVERSITY OF SOUTH FLORIDA

## *Major Research Area Paper Presentation*

*Parallel computing of contour tree and persistent pairing of Reeb graph*

by

Junyi Tu

For the Ph.D. degree in Computer Science & Engineering

*The emerging field of Topological Data Analysis (TDA) combines theory of persistent homology, efficient algorithms and visualization techniques to tackle the big data challenge. The power of TDA lies in its multiscale view of data, which is robust to small perturbations in the data. In this presentation, we will discuss 1) our previous work on parallel computing of contour trees, 2) the ongoing work on persistent pairing of Reeb graphs and 3) future research directions.*

April 23 2018

11:30AM – 12:30PM

ENB 337

THE PUBLIC IS INVITED

### Examining Committee

Paul Rosen, Ph.D., Major Professor

Les Piegler, Ph.D.

Yicheng Tu, Ph.D.

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Computer Science and Engineering  
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