

# UNIVERSITY OF SOUTH FLORIDA

## Major Research Area Paper Presentation

### Fostering Research and Innovation in Public Transportation: A Data Driven Approach

by

**Jorge Adorno Nieves**

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

Within public transportation, data-driven metrics are fundamental to an agency's ability to properly plan and manage the resources within their network. Past efforts to analyze the performance of these systems have been hampered by issues such as difficult data acquisition, varying data formats, and limited transferability and generalization across transit agencies. This research introduces a novel system for archiving, retrieval, and use of real-time and scheduled public transit data which can serve as a foundation for performance assessment, big-data analysis and machine learning applications. By leveraging standardized data formats and new software technologies, these tasks can be performed across multiple agencies concurrently. Doing so allows researchers to compare methods and approaches across a wider set of environments.

Friday, November 1, 2019

10:00 AM

ENB 313

**THE PUBLIC IS INVITED**

Examining Committee

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