## UNIVERSITY OF SOUTH FLORIDA

## Defense of a Doctoral Dissertation

Active Cleaning of Label Noise Using Support Vector Machines by Rajmadhan Ekambaram

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

Large scale datasets collected using non-expert labelers are prone to labeling errors. Finding the label noise examples through a manual review process is largely unexplored due to the cost and time factors involved. This dissertation proposes a novel solution exploiting the characteristics of the Support Vector Machine (SVM) classifier to identify uniform random label noise examples in a dataset. Application of this method is illustrated with problems involving real-world large scale datasets. The results show that most mislabels are quickly and effectively identified by the approaches developed in this dissertation.

Thursday, May 25, 2017 11:00 AM ENB 313

## Examining Committee

Sanjukta Bhanja, Ph.D., Chairperson Lawrence O. Hall, Ph.D., Co-Major Professor Dmitry B. Goldgof, Ph.D., Co-Major Professor Rangachar Kasturi, Ph.D. Sudeep Sarkar, Ph.D. Ravi Sankar, Ph.D. Thomas Sanocki, Ph.D.

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