

Literature Review

Connor H. McCurley
Electrical and Computer Engineering
University of Florida, Gainesville
FL 32611, USA

August, 2019

1 Manifold / Representation Learning

- Supervised manifold learning
- Classic approaches
- Graphs
- Neural nets
- Time series embedding

2 Multiple Instance Learning

- General approaches
- Manifold construction with data imprecision

3 Outlier/ Adversarial Detection

- Robustness measures
- Outlier detection on manifolds

4 Classifier Fusion/ Selection

- Fusion using manifolds
- HME, Choquet integral, HMM, and related context-dependent approaches
- Dissimilarity metrics

5 Time Series Adaptation

- Merging/ stitching
- System growing/ pruning
- HMM modeling
- Continual learning