# Semi-Supervised Locally Linear Embedding (SSLLE)

Application & Sensitivity Analysis of Critical Hyperparameters

#### 0 AGENDA

- 1 Problem
- 2 Local graph-based manifold learning (LGML)
  - 1 Taxonomy
  - 2 Concept
- 3 Techniques
  - 1 Unsupervised
  - 2 Semi-supervised SSLLE
  - 3 Challenges
- 4 Sensitivity analysis
  - 1 Setup
  - 2 Results
- 5 Discussion

#### 1 PROBLEM MANIFOLD LEARNING

#### 1 PROBLEM NOTATION

2 Local graph-based manifold learning

#### 2.1 TAXONOMY OVERVIEW

#### 2.2 CONCEPT GRAPHS & EIGENVECTORS

## 3 LGML techniques

#### 3.1 UNSUPERVISED LLE

#### 3.2 SEMI-SUPERVISED SSLLE

#### 3.3 CHALLENGES NEIGHBORHOOD RELATIONS

4 Sensitivity analysis

### 4.1 SETUP SCENARIOS

### 4.1 SETUP EVALUATION

#### 4.2 RESULTS FOO

### 5 Discussion

#### 5 DISCUSSION FOO