

## Candidate study

**Title:** Defect Prediction

**Abstract:** Apply SVM to defect prediction.

### Tokenization

Concatenating title and abstract,  
stemming and stop words removal

### Bag of words

["defect", "predict", "appli", "svm", "defect", "predict"]

### Featurization

Term Frequency

### Term Frequency

{"defect": 2, "predict": 2, "appli": 1, "svm": 1}

### Dimensionality Reduction

Feature Hashing

### Feature Vector

[3, 2, 1]

### L2 Normalization

$$x_{norm} = x / \sqrt{x^T x}$$

### Normalized Feature Vector

[0.80, 0.53, 0.27]