

Title: Defect Prediction

Abstract: Apply SVM to defect prediction.

### **Tokenization**

Concatenating title and abstract, stop words removal

# Bag of words

["defect", "prediction", "apply", "svm", "defect", "prediction"]

### **Featurization**

**Term Frequency** 

# **Term Frequency**

{"defect": 2, "prediction": 2, "apply": 1, "svm": 1}

# **Dimensionality Reduction**

Feature Selection by tf-idf

### **Feature Vector**

[2, 2, 1]

#### **Normalization**

L2: 
$$x_{norm} = x/\sqrt{x^T x}$$

# **Normalized Feature Vector**

[0.67, 0.67, 0.33]