Abstract

Eliminating unwanted e-mail (spam) in large amount manually can be exhausting. However, spam filtering mechanism can solve this problem. Spam filtering blocks spam automatically based on specified rules. More developed spamming technique over time will increased rule variation. Specify rules manually surely can be time consuming.

Therefore need an automatic rule(s) generation mechanism according to existing data. Suitable method for the problem is learning technique. The technique can found rules automatically and expect it to be generally valid for unclassified data. One of the technique can be used is Grammatical Evolution (GE) method.

GE can produce solutions in function/program form based on grammar. Evolved grammar suited to the problem of interest. With this capability, GE used for producing rules in program form then it is referable for classification process.

In this final project we made software to implement GE method for rule generation process and classification on spam filtering. The results show that defined more complex grammar has given higher accuracy as well as increasing chromosome size and crossover rate. However varied population size and mutation rate doesn't give much effect on accuracy.

Keywords: spam filtering, rule, grammatical evolution, classification.