

AI Anti-Scam/Spam Bot

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Proposal

Problem

Scam emails accounted for 45% of all emails in 2018, number has increased since, leading to 76% of businesses falling victim to one in 12 months

Solution

Email address for public to forward emails to.
Program accesses inbox and uses different Natural Language Processing techniques to conclude whether the email is Spam or not.
Email returned to user with Likelihood of email being Scam, Spam, or neither.

Other Solutions

Range from anti-virus software requiring subscription with average pricing being \$40+ annually to handcrafted solutions on places such as GitHub with complicated setup. Some included in popular platforms like Gmail and Outlook but these often fail.

Challenges

Passing data between modules
Differences between Scam and Spam
Cleaning Data Sets to Work with classifiers
Correctly classifying the Emails

Design

Email Module

Check the inbox
Program accesses & retrieves emails from inbox
Send email to User
Program can take a users email & reply to them
Create useful tutorial to setup spam filter
Included in return email with instructions on how to setup spam address is sent to the user when an email is confirmed to be spam or scam
Ability to add emails to the data set
Take emails that people have identified as scam, spam or neither and add them to the data set

Controller

Passes data between modules by writing to two CSV files, raw data and tagged data

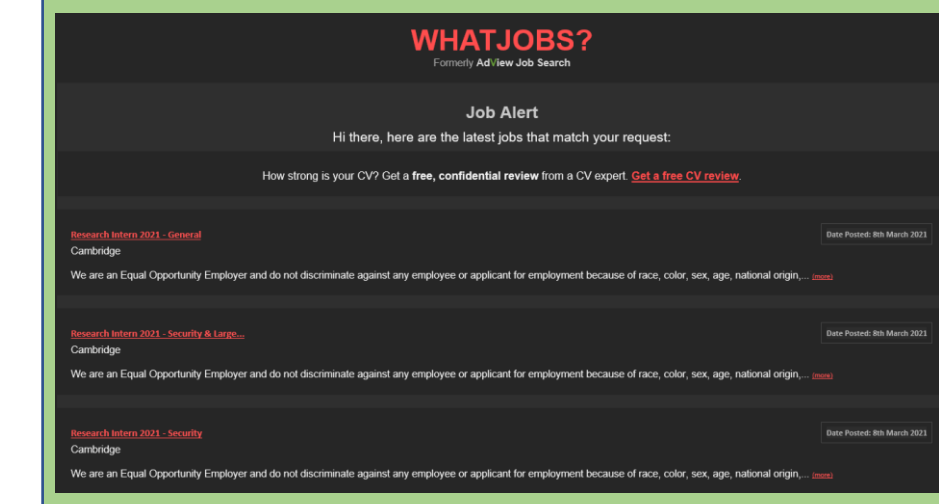
Classifier Module

Use keywords
Keywords from questionnaire prior to training
Train model based on training data
Algorithm trains model from spam ham dataset
Classify an email as Scam, Spam or neither
See if features relate to features of the training data and classify accordingly
Gather features
Look through email & gather features via processing and pre-processing to classify

Implementation

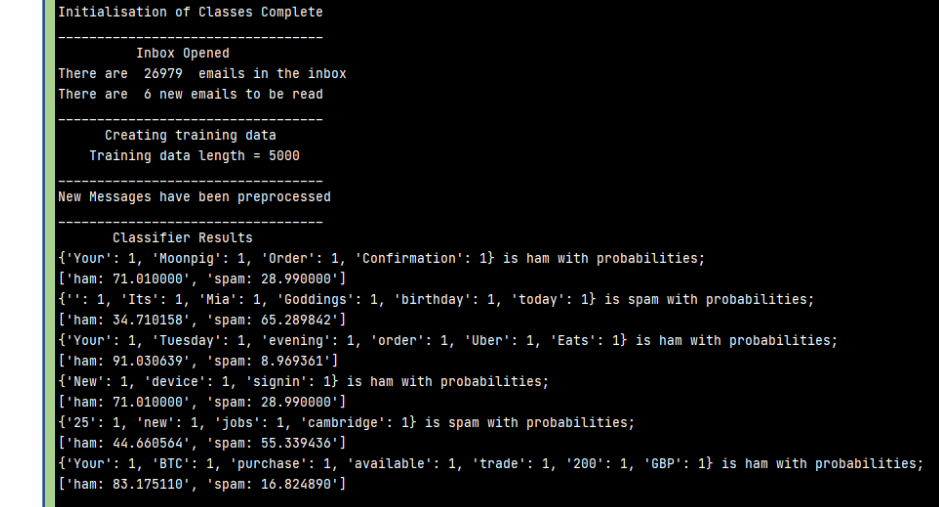
Users Email

Forward a suspicious email



AI Magic

Gets Email and Classifies it



Return Email

Email Sent to User with Probabilities

