

Method Selection for Automatic Substitution Analysis



Please choose between the following algorithms:

- ☒ Method 1 based on the frequency analysis of digrams in the text

This method analyses the frequency of digrams in the ciphertext and guesses the key based on a standard digram distribution.

The method is suited best for longer texts.

Automatic language recognition is included. Processing of texts that do not contain space characters is also possible.

Source: Thomas Jakobsen "A Fast Method for Cryptanalysis of Substitution Ciphers", Cryptologia 19:3, 1995

- ☐ Method 2 based on the recognition of the most frequent words of a language

This method is based on a list of the most frequent words of a particular language. The words of the ciphertext are compared (according to their pattern) with the words of the list.

Using a search tree the substitution compatible with the most partial substitutions is determined. This method can process German and English standard texts. Space characters must be preserved on correct positions in the ciphertext.

Source: George W. Hart "To Decode Short Cryptograms", Communications of the ACM, Sept 1994, Vol 37, No.4

OK

Cancel

GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz>

Automatic Substitution Analysis 1 - Optio... X

SPACE character

- ☐ The SPACE character was also substituted
(i.e. the encryption alphabet contains "SPACE").

GUI

- ☒ Do not show intermediate results (faster).

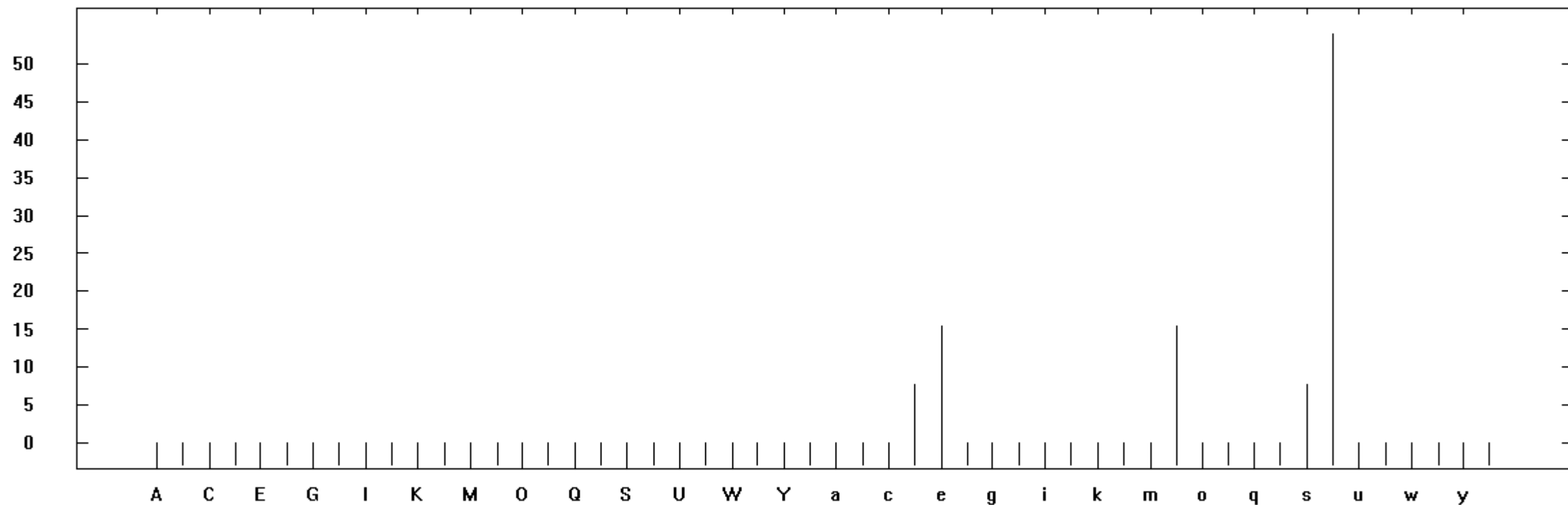
OK

Cancel

ASCII Histogram of <Substitution encryption of <abc.txt>, key <ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz> -Substitution- EQJDLRKACWSGMHNUZBOIFVPYXT...

ASCII Histogram of <Substitution encryption of <abc.txt>, key <ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz> -Substitution- EQJDLRKACWSGMHNUZBOIFVPYXT> (13 characters)

Frequency [%]



Value