

# NAME

trainer  
identifier

# SYNOPSIS

```
./trainer [TRAIN D] [STORE_TRAIN P D]  
./identifier [TRAIN D] [TEST P D] [STORE_TEST P D]
```

[] = files **containing** directories to **TEXT CORPORA**  
[] = **PATH** and **FILENAME** where the directories and **PROFILES** should be stored

# DESCRIPTION

trainer - generates the profiles for every possible text corpus  
identifier - generates profiles for the test files, then compares them with training profiles

# OPTIONS

inside Identifier.cpp

print() - printing without distance  
print\_withDist() - printing with distance

# DATA

/data/

test\_data/... - contains 21 text files with ~4kb and 1 empty file  
train\_data/... - contains 20 text files with ~10kb  
  
test\_dir.txt - contains the directories of all test files mentioned above  
train\_dir.txt - contains the directories of all train files mentioned above

# BUGS

## **GenerateProfile.hpp**

There are a few characters which could not be filter out and causing a new line. So it will bring some calculation failures in the IdentifyLanguage.hpp and more lines in the profile then it should be (6 of 20 languages had this problem). There are still just too few of these characters to make a difference at the end of the calculation (still all 20 languages of 20 correctly determined by the program).

## **.prof**

There are non representing characters uni, bi and trigrams the profiles, because languages like Chinese need more than a char size to show correctly, even a string is not enough.

# COMPILERS TESTED

Mac OSX g++

Windows cl from Visual Studio

# SOURCES

For the test corpus: Wikipedia Politik and Wikipedia Politologie (given languages)

For the train corpus: Wikipedia Oper and Wikipedia Opera (given languages)

William B. Cavnar and John M. Trenkle. N-Gram-Based Text Categorization, Environmental Research Institute of Michigan

—> <https://www.let.rug.nl/vannoord/TextCat/textcat.pdf>

# AUTHOR

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