SWI-Prolog Natural Language Processing Primitives

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Abstract

This package contains some well known basic rountines for natural language processing and information retrieval.

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1 Double Metaphone – Phonetic string matching

The library `double_metaphone` implements the *Double Metaphone* algorithm developed by Lawrence Philips and described in "The Double-Metaphone Search Algorithm" by L Philips, C/C++ Users Journal, 2000. Double Metaphone creates a key from a word that represents its phonetic properties. Two words with the same Double Metaphone are supposed to sound similar. The Double Metaphone algorithm is an improved version of the *Soundex* algorithm.

double_metaphone(+*In*, -*MetaPhone***)**
Same as `double_metaphone/3`, but only returning the primary metaphone.

double_metaphone(+*In*, -*MetaPhone*, -*AltMetaphone***)**
Create metaphone and alternative metaphone from *In*. The primary metaphone is based on english, while the secondary deals with common alternative pronounciation in other languages. *In* is either and atom, string object, code- or character list. The metaphones are always returned as atoms.

1.1 Origin and Copyright

The Double Metaphone algorithm is copied from the Perl library that holds the following copyright notice. To the best of our knowledge the Perl license is compatible to the SWI-Prolog license schema and therefore including this module poses no additional license conditions.

2 Installation

2.1 Unix systems

Installation on Unix system uses the commonly found *configure*, *make* and *make install* sequence. SWI-Prolog should be installed before building this package. If SWI-Prolog is not installed as `pl`, the environment variable `PL` must be set to the name of the SWI-Prolog executable. Installation is now accomplished using:

```
% ./configure
% make
% make install
```

This installs the foreign libraries in `$PLBASE/lib/$PLARCH` and the Prolog library files in `$PLBASE/library`, where `$PLBASE` refers to the SWI-Prolog 'home-directory'.

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