



**HiTZ**

Hizkuntza Teknologiako Zentroa  
Basque Center for Language Technology



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## About ixा

- IXA is a research group working on Natural Language Processing since 1988.
- It was created with the aim of developing basic computational resources for Basque.
- The group is composed of 35 computer scientists, 14 linguists and 3 research technicians (42 Ph.D.).
- The IXA Group offers two masters: EM LCT & HAP/LAP. [ixa.eus/master](http://ixa.eus/master)

## Projects



## Products (ixa.eus/produktuak)

### Medical domain

- **FreelingMed + ADR detection:** Freeling adapted for medicine and adverse drug reaction detection [ixa2.si.ehu.eus/adr2openbrat](http://ixa2.si.ehu.eus/adr2openbrat)
- **NeoTerm:** Generator of medical Neoclassical compounds [ixa2.si.ehu.eus/neoterm](http://ixa2.si.ehu.eus/neoterm)
- **Medical Entity Recognizer (Perceptron)** [ixa2.si.ehu.eus/ixamed-pertzeptroia/NER\\_Pertzeptroia.zip](http://ixa2.si.ehu.eus/ixamed-pertzeptroia/NER_Pertzeptroia.zip)

## Products (ixa.eus/produktuak)

### ixa pipes (multilingual) [ixa2.si.ehu.eus/ixa-pipes](http://ixa2.si.ehu.eus/ixa-pipes)

Multilingual NLP tools

### ixaKat (eus) [ixa2.si.ehu.eus/ixakat](http://ixa2.si.ehu.eus/ixakat)

A modular chain of NLP Tools for Basque

- **ixa-pipe-pos-eu:** morphological analyzer and a PoS tagger
- **ixa-pipe-dep-eu:** a dependency parser

### Machine Translation

- **matxin:** Machine translation from Spanish to Basque [matxin.sourceforge.net](http://matxin.sourceforge.net)
- **EUSMT:** Statistical Machine Translation from Spanish to Basque [ixa.si.ehu.eus/openmt2](http://ixa.si.ehu.eus/openmt2)
- **Neural Machine Translation:** [ixa.eus/nmtdemo](http://ixa.eus/nmtdemo)
- **Unsupervised Neural Machine Translation** [github.com/artetxem](http://github.com/artetxem) (tools and resources)
- **Mitzuli:** The open translator app for Android [mitzuli.com](http://mitzuli.com)

### Euskal RST Treebank [ixa2.si.ehu.eus/diskurtsoa](http://ixa2.si.ehu.eus/diskurtsoa)

Basque RST relation- and tree-bank

### e-ROLda [ixa2.si.ehu.eus/e-rolda](http://ixa2.si.ehu.eus/e-rolda)

A tool for looking up verb entries in the BVI lexicon and examples in EPEC-RoLSem corpus

### BasWN [ixa2.si.ehu.eus/mcr](http://ixa2.si.ehu.eus/mcr)

Multilingual knowledge lexical database

### EPEC Corpus

- **DEP (Basque Dependency Treebank)** [ixa2.si.ehu.eus/epecdep](http://ixa2.si.ehu.eus/epecdep)  
A syntactic corpus tagged using the Dependency Grammar Theory
- **EuSemcor** [ixa2.si.ehu.eus/eusemcor](http://ixa2.si.ehu.eus/eusemcor)  
Corpus tagged with Basque WordNet senses

### Xuxen [xuxen.eus](http://xuxen.eus)

Basque spelling corrector