Aleph

`http://www.comlab.ox.ac.uk/oucl/research/areas/machlearn/Aleph/`

Algoritmo básico:

1. Selecionar um exemplo positivo para ser generalizado. Se não existir, termina; caso contrário, prosseguir para passo 2.
2. Construir uma ''bottom clause''.
3. Encontrar uma cláusula mais geral do que a ''bottom clause''.
4. Adicionar a cláusula à teoria corrente.

Aleph: some parameters

```
:- set(clauselength,5).
:- set(depth, 200).
:- set(i,3).
:- set(noise,0).
:- set(minacc,0.7).
:- set(nodes,1000000).
:- set(m,20).
:- set(evalfn,mestimate).
:- set(test_pos,'/u/dutra/Protein/prot_test_set.f').
:- set(test_neg,'/u/dutra/Protein/prot_test_set.n').
:- set(optimise_clauses,true).

:- set(record,true).
:- set(recordfile,'prot_train_set.out').
:- set(samplesize,0).
```

Aleph: modes and types

```
:- modeh(1,metabolism(+gene)).

:- modeb(1,essential(+gene,#essential)).
:- modeb(1,class(+gene,#class)).
:- modeb(1,complex(+gene,#complex)).
:- modeb(1,phenotype(+gene,#phenotype)).
:- modeb(1,motif(+gene,#motif)).
:- modeb(1,chromosome(+gene,#chromosome)).
:- modeb(*,gte(+number,#number)).
:- modeb(*,interaction(+gene,-gene,-intertype,-number)).
:- modeb(1,intertype(+intertype,#intertype)).
```

Aleph: some Pos Examples

```
metabolism('G239098').
metabolism('G234980').
metabolism('G235245').
metabolism('G234108').
metabolism('G238387').
metabolism('G240504').
metabolism('G236733').
metabolism('G239673').
metabolism('G240292').
metabolism('G234681').
metabolism('G234954').
metabolism('G235467').
```

Aleph: BK

```
interaction('G234062','G235011','Physical',?).
interaction('G234064','G234126','Genetic-Physical','0.914095071').
interaction('G234064','G235065','Genetic-Physical','0.751584888').
interaction('G234064','G235571','Physical','0.969081977').
interaction('G234065','G234073','Physical','0.749192312').
interaction('G234065','G234371','Genetic','0.823773738').
interaction('G234065','G234754','Physical','0.691845712').

chromosome('G234064','1').
chromosome('G234065','1').
chromosome('G234070','1').
chromosome('G234073','1').
```