fastsemsim Documentation

Release 0.9

Marco Mina

December 10, 2014

CONTENTS

1 Code **3**

2 fastsemsim package **5**
- 2.1 Subpackages . . . 5
- 2.2 Submodules . . . 27
- 2.3 fastsemsim.fastsemsim_cmdline module . . . 27
- 2.4 Module contents . . . 28

3 Indices and tables **29**

Python Module Index **31**

Index **33**

Contents:

CHAPTER

ONE

CODE

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

`Ontology.`**`Ontology`**
alias of `Ontology.Ontology`

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

CHAPTER

TWO

FASTSEMSIM PACKAGE

2.1 Subpackages

2.1.1 fastsemsim.Ontology package

Submodules

fastsemsim.Ontology.AnnotationCorpus module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.Ontology.AnnotationCorpus.**AnnotationCorpus**(*go*)

Bases: object

class **ECFilter**(*params*)

EC = {}

filter(*EC*)

inclusive = False

name = 'EC'

class AnnotationCorpus.**GOFilter**(*params=None*)

GO = None

filter(*GO*)

inclusive = True

int_go = None

name = 'GO'

set(*params*)

class AnnotationCorpus.**TaxonomyFilter**(*params*)

filter(*taxonomy*)

inclusive = False

name = 'taxonomy'

taxonomy = {}

AnnotationCorpus.**annotations = {}**

AnnotationCorpus.**annotations_field2pos = {}**

AnnotationCorpus.**annotations_fields = []**

AnnotationCorpus.**constrain**()

AnnotationCorpus.**initCommonFilter**()

AnnotationCorpus.**int_checkConsistency**()

AnnotationCorpus.**int_resetFields**()

AnnotationCorpus.**isConsistent**()

AnnotationCorpus.**isOk**(*field*, *value*)

AnnotationCorpus.**load**(*fname*, *ftype*, *params={}*)

AnnotationCorpus.**obj_field2pos = {}**

AnnotationCorpus.**obj_fields = []**

AnnotationCorpus.**obj_set = {}**

AnnotationCorpus.**parse**(*fname*, *ftype*, *params={}*)

AnnotationCorpus.**reset**()

AnnotationCorpus.**resetCommonfilter**(*i*)

AnnotationCorpus.**resetFilter**(*field*)

AnnotationCorpus.**reverse_annotations = {}**

AnnotationCorpus.**reverse_annotations_field2pos = {}**

AnnotationCorpus.**reverse_annotations_fields = []**

AnnotationCorpus.**sanitize**()

AnnotationCorpus.**setCommonfilters**(*inf*)

AnnotationCorpus.**setFilter**(*field*, *selector*)

AnnotationCorpus.**term_field2pos = {}**

AnnotationCorpus.**term_fields = []**

AnnotationCorpus.**term_set = {}**

fastsemsim.Ontology.CellOntology module

Copyright 2011-2013 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.Ontology.CellOntology.**CellOntology**(*terms*, *edges*, *parameters*)
Bases: fastsemsim.Ontology.Ontology.Ontology

alt_ids = None

obsolete_ids = None

fastsemsim.Ontology.DiseaseOntology module

Copyright 2011-2013 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.Ontology.DiseaseOntology.**DiseaseOntology**(*terms*, *edges*, *parameters*)
Bases: fastsemsim.Ontology.Ontology.Ontology

alt_ids = None

obsolete_ids = None

fastsemsim.Ontology.FFOntology module

Copyright 2011-2013 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

@mail marco.mina.85@gmail.com @version 2.0 @desc GeneOntology class: extend Ontology to handle the GeneOntology

class fastsemsim.Ontology.FFOntology.**FFOntology**(*terms*, *edges*, *parameters=None*)

Bases: fastsemsim.Ontology.Ontology.Ontology

alt_ids = None

id2name(*codes*, *alt_check=False*)

name2id(*codes*, *alt_check=True*)

obsolete_ids = None

fastsemsim.Ontology.GAF2AnnotationCorpus module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.Ontology.GAF2AnnotationCorpus.**GAF2AnnotationCorpus**(*ac*, *parameters=None*)

Bases: object

int_comment = '!'

int_interpretParameters()

int_separator = '\t'

isOk()

parse(*fname*)

setFields()

fastsemsim.Ontology.GOAnnotationCorpus module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.Ontology.GOAnnotationCorpus.**GOAnnotationCorpus**(*go=None*)

class **ECFilter**(*params*)

EC = {}

filter(*EC*)

inclusive = False

name = 'EC'

class GOAnnotationCorpus.**GOFilter**(*params=None*)

GO = None

filter(*GO*)

inclusive = True

int_go = None

name = 'GO'

set(*params*)

class GOAnnotationCorpus.**TaxonomyFilter**(*params*)

filter(*taxonomy*)

inclusive = False

name = 'taxonomy'

taxonomy = {}

GOAnnotationCorpus.**constrain**()

GOAnnotationCorpus.**initCommonFilter**()

GOAnnotationCorpus.**int_checkConsistency**()

GOAnnotationCorpus.**int_exclude_GO_root** = True

GOAnnotationCorpus.**int_resetFields**()

GOAnnotationCorpus.**isConsistent**()

GOAnnotationCorpus.**isOk**(*field*, *value*)

GOAnnotationCorpus.**load**(*fname*, *ftype*, *params={}*)

GOAnnotationCorpus.**parse**(*fname*, *ftype*, *params={}*)

GOAnnotationCorpus.**reset**()

GOAnnotationCorpus.**resetCommonfilter**(*i*)

GOAnnotationCorpus.**resetFilter**(*field*)

GOAnnotationCorpus.**sanitize**()

GOAnnotationCorpus.**setCommonfilters**(*inf*)

GOAnnotationCorpus.**setFilter**(*field*, *selector*)

fastsemsim.Ontology.GeneOntology module

Copyright 2011-2013 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

@mail marco.mina.85@gmail.com @version 2.0 @desc GeneOntology class: extend Ontology to handle the GeneOntology

class fastsemsim.Ontology.GeneOntology.**GeneOntology**(*terms*, *edges*, *parameters*)
Bases: fastsemsim.Ontology.Ontology.Ontology

fastsemsim.Ontology.Ontology module

Supported ontologies are those representable as multirooted DAGs. It is not required DAGs to be disconnected, but 'inter-DAG' edges are required to be specified. Class Ontology provides a function is_consistent that checks whether this contraints is satisfied. Inconsistent DAGs are NOT currently usable.

Different datastructures can be used to represent ontologies. The section Variables lists a set of different alternatives. Currently Ontology is tuned for using a parent-children and a node-edge representation.

Superclasses can extend the basic datastructure with additional layers of information.

class fastsemsim.Ontology.Ontology.**Ontology**(*terms*, *edges*, *parameters=None*)
Bases: object

Base class for the representation of an ontology. It currently supports any multi-rooted DAG (Directed Acyclic Graph).

debug = False

det_roots()

edge_number()

gen_error = False

id2node(*codes*, *alt_check=True*)

is_consistent()

is_valid(*term*)

name2node(*codes*)

node2id(*codes*, *alt_check=False*)

node_number()

fastsemsim.Ontology.PlainAnnotationCorpus module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.Ontology.PlainAnnotationCorpus.**PlainAnnotationCorpus**(*ac*, *parameters=None*)

Bases: object

int_interpretParameters()

isOk()

parse(*fname*)

setFields()

fastsemsim.Ontology.ontologies module

Current implementation can only handle single-scope ontologies.

class fastsemsim.Ontology.ontologies.**OboParser**(*ontology_class*, *parameters={}*)

alt_id_tag = 'alt_id'

comment_tag = '!'

consider_tag = 'consider'

def_tag = 'def'

delimiter_tag = ':'

find_next_term()

has_tag_structure(*st*)

id_tag = 'id'

is_a_tag = 'is_a'

is_obsolete_tag = 'is_obsolete'

name_tag = 'name'

namespace_tag = 'namespace'

parse(*_handle*)

relationship_delimiter_tag = ' '

relationship_tag = 'relationship'

replaced_by_tag = 'replaced_by'

split_rel_tag(*st*)

split_tag(*st*)

term_tag = '[Term]'

typedef_tag = '[Typedef]'

class fastsemsim.Ontology.ontologies.**OboXmlParser**(*ontology_class*, *parameters={}*)
Bases: xml.sax.handler.ContentHandler

alt_id_tag = 'alt_id'

characters(*ch*)

comment_tag = '!'

consider_tag = 'consider'

def_tag = 'def'

delimiter_tag = ':'

endElement(*name*)

id_tag = 'id'

is_a_tag = 'is_a'

is_obsolete_tag = 'is_obsolete'

name_tag = 'name'

namespace_tag = 'namespace'

part_of_tag = 'part_of'

relationship_delimiter_tag = ' '

relationship_tag = 'relationship'

relationship_to_tag = 'to'

relationship_type_tag = 'type'

replaced_by_tag = 'replaced_by'

startElement(*name*, *attrs*)

term_tag = 'term'

fastsemsim.Ontology.ontologies.**load**(*source=None*, *source_type='obo'*, *ontology_type='GeneOntology'*, *parameters={}*)

fastsemsim.Ontology.ontologies.**parse**(*source=None*, *source_type='obo'*, *ontology_type='GeneOntology'*, *parameters={}*)

Module contents

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

2.1.2 fastsemsim.SemSim package

Submodules

fastsemsim.SemSim.BMASemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.BMASemSim.**BMASemSim**(*ontology*, *ac*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.MixSemSim.MixSemSim

fair = True

fastsemsim.SemSim.CosineSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.CosineSemSim.**CosineSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = False

SS_type = 'Groupwise'

dotprod(*vector1*, *vector2*)

extend_annotations = True

fastsemsim.SemSim.CzekanowskiDiceSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.CzekanowskiDiceSemSim.**CzekanowskiDiceSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = False

SS_type = 'Groupwise'

extend_annotations = True

fastsemsim.SemSim.DiceSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.DiceSemSim.**DiceSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = False

SS_type = 'Groupwise'

extend_annotations = True

fastsemsim.SemSim.GSESAMESemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.GSESAMESemSim.**GSESAMESemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = False

SS_type = 'Pairwise'

generic_score = 0.5

is_a_score = 0.8

neg_regulates_score = 0.6

part_of_score = 0.6

pos_regulates_score = 0.6

regulates_score = 0.6

score_ancestors(*term*)

score_edge(*tp*, *t*)

fastsemsim.SemSim.JaccardSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.JaccardSemSim.**JaccardSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = False

SS_type = 'Groupwise'

extend_annotations = True

fastsemsim.SemSim.JiangConrathSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.JiangConrathSemSim.**JiangConrathSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = True

SS_type = 'Pairwise'

fastsemsim.SemSim.LinSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.LinSemSim.**LinSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = True

SS_type = 'Pairwise'

fastsemsim.SemSim.MixSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class `fastsemsim.SemSim.MixSemSim.`**`MixSemSim`**(*ontology*, *ac*, *util=None*, *do_log=False*)

Bases: `object`

`SemSim`(*set1*, *set2*, *TSS*)

fastsemsim.SemSim.ObjSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class `fastsemsim.SemSim.ObjSemSim.`**`ObjSemSim`**(*ontology*, *ac*, *TSS=None*, *MSS=None*, *util=None*, *do_log=False*)

Bases: `object`

`SemSim`(*obj1*, *obj2*, *root=None*)

fastsemsim.SemSim.ObjSetSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class `fastsemsim.SemSim.ObjSetSemSim.`**`ObjSetSemSim`**(*ontology*, *ac*, *TSS=None*, *MSS=None*, *util=None*, *do_log=False*)

`SemSim`(*obj1*, *obj2*, *root=None*)

fastsemsim.SemSim.ResnikSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.ResnikSemSim.**ResnikSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = True

SS_type = 'Pairwise'

fastsemsim.SemSim.SemSimUtils module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SemSimUtils.**SemSimUtils**(*ontology*, *ac=None*)

Bases: object

det_IC(*term*)

det_IC_table()

det_MICA(*term1*, *term2*)

det_ancestors_union(*term1*, *term2*)

det_common_ancestors(*term1*, *term2*)

difference(*set1*, *set2*)

get_ancestors(*term1*)

int_det_IC(*term_id*)

int_det_IC_table()

int_det_ancestors(*goid*, *temp_intra*)

int_det_ancestors_table()

int_det_freq(*term_id*)

int_det_freq_table()

int_det_lineage()

int_det_offspring(*goid*, *temp_intra*)

int_det_offspring_table()

int_det_p(*term_id*)

int_det_p_table()

int_merge_sets(*set1*, *set2*)

intersection(*set1*, *set2*)

fastsemsim.SemSim.SetSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SetSemSim.**SetSemSim**(*ontology*, *ac=None*, *TSS=None*, *MSS=None*, *util=None*, *do_log=False*)

SemSim(*obj1*, *obj2*, *root=None*)

fastsemsim.SemSim.SimGICSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SimGICSemSim.**SimGICSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = True

SS_type = 'Groupwise'

fastsemsim.SemSim.SimICNDSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SimICNDSemSim.**ICNDSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = True

SS_type = 'Pairwise'

generic_score = 1.0

is_a_score = 1.0

neg_regulates_score = 1.0

part_of_score = 1.0

pos_regulates_score = 1.0

regulates_score = 1.0

score_ancestors(*term*)

score_edge(*tp*, *t*)

fastsemsim.SemSim.SimICNPSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SimICNPSemSim.**ICNPSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = True

SS_type = 'Pairwise'

generic_score = 1.0

is_a_score = 1.0

neg_regulates_score = 1.0

part_of_score = 1.0

pos_regulates_score = 1.0

regulates_score = 1.0

score_ancestors(*term*)

score_edge(*tp*, *t*)

fastsemsim.SemSim.SimICSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SimICSemSim.**SimICSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = True

SS_type = 'Pairwise'

use_Lin = True

fastsemsim.SemSim.SimNTOSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SimNTOSemSim.**SimNTOSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = False

SS_type = 'Groupwise'

extend_annotations = True

fastsemsim.SemSim.SimRelSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SimRelSemSim.**SimRelSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = True

SS_type = 'Pairwise'

use_Lin = True

fastsemsim.SemSim.SimTOSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SimTOSemSim.**SimTOSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = False

SS_type = 'Groupwise'

fastsemsim.SemSim.SimUISemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.SimUISemSim.**SimUISemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: fastsemsim.SemSim.TermSemSim.TermSemSim

IC_based = False

SS_type = 'Groupwise'

fastsemsim.SemSim.TermSemSim module

TermSemSim class

This class provides the prototype for a generic Term Semantic Similarity measure (TSS)

There are two types of Term Sem Sim: those which evaluate the semantic similarity between two sets of terms (groupwise - G_TSS), and those which can only evaluate the similarity between pairs of GO terms (pairwise - P_TSS). Each class extending TermSemSim should declare whether it is groupwise or pairwise.

TermSemSim relies on SemSimUtils to perform a lot of tasks (such as evaluating Term IC or common ancestors) a SemSimUtils object can be passed to the constructor as input data. Otherwise, a new instance will be created. Using only one copy of SemSimUtils helps reducing time and spece requirements and is strongly adviced.

exception fastsemsim.SemSim.TermSemSim.**MissingAcException**(*message*)

Bases: exceptions.Exception

class fastsemsim.SemSim.TermSemSim.**TermSemSim**(*ontology*, *ac=None*, *util=None*, *do_log=False*)

Bases: object

G_TSS = 'Groupwise'

IC_based = None

P_TSS = 'Pairwise'

SS_type = None

SemSim(*term1*, *term2*, *ontology=None*)

format_and_check_data = True

setSanityCheck(*en*)

fastsemsim.SemSim.avgSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.avgSemSim.**avgSemSim**(*ontology*, *ac*, *util=None*, *do_log=False*)
Bases: fastsemsim.SemSim.MixSemSim.MixSemSim

fastsemsim.SemSim.maxSemSim module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.SemSim.maxSemSim.**maxSemSim**(*ontology*, *ac*, *util=None*, *do_log=False*)
Bases: fastsemsim.SemSim.MixSemSim.MixSemSim

Module contents

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

fastsemsim.SemSim.**select_mix_SemSim**(*mix_name*)

fastsemsim.SemSim.**select_term_SemSim**(*tss_name*)

fastsemsim.SemSim.**term_SemSim_measures = {'G-SESAME': (<class 'fastsemsim.SemSim.GSESAMESemSim.GSES**
Struct mix_strategies. Contains a list of all available mixing strategies It is built as a dictionary. Mixing strategy names are used as keys. Each entry is a tuple with the following structure: (class pointer,)

2.1.3 fastsemsim.data package

Submodules

fastsemsim.data.dataset module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

class fastsemsim.data.dataset.**Dataset**(*descriptor=None*)
Bases: object

get_annotation_corpus(*dataset_name*)

get_annotation_corpus_by_species(*ontology=None*, *species=None*)

get_dataset(*dataset_name*)

get_default_annotation_corpus(*ontology=None*, *species=None*)

get_default_ontology(*ontology_type*)

get_ontology(*dataset_name*)

populate(*descriptor=None*)

Module contents

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

2.1.4 fastsemsim.examples package

Submodules

fastsemsim.examples.load_annotation_corpus module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

fastsemsim.examples.load_ontology module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

Module contents

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

2.2 Submodules

2.3 fastsemsim.fastsemsim_cmdline module

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

`fastsemsim.fastsemsim_cmdline.`**`build_cmdline_args_parser`**`()`
Build a cmdline arg parser

`fastsemsim.fastsemsim_cmdline.`**`check_parameters`**`()`
Check whether the set of parameters is formally correct to run a query

`fastsemsim.fastsemsim_cmdline.`**`det_ss`**`()`
Determine SS

`fastsemsim.fastsemsim_cmdline.`**`init_parameters`**`()`
Initialize parameters

`fastsemsim.fastsemsim_cmdline.`**`init_ss`**`()`
Initialize SS class

`fastsemsim.fastsemsim_cmdline.`**`load_IC_from_file`**`(`*list_file*, *separator='\t'*`)`

`fastsemsim.fastsemsim_cmdline.`**`load_ac`**`()`
Load the Annotation Corpus

`fastsemsim.fastsemsim_cmdline.`**`load_ontology`**`()`
Load ontology

`fastsemsim.fastsemsim_cmdline.`**`load_params_from_file`**`(`*list_file*`)`
Load parameters from file

`fastsemsim.fastsemsim_cmdline.`**`load_query`**`()`
Load the query

`fastsemsim.fastsemsim_cmdline.`**`load_query_from_file`**`()`
Load query from a file

`fastsemsim.fastsemsim_cmdline.`**`prbool`**`(`*string*`)`
Parse boolean parameters

`fastsemsim.fastsemsim_cmdline.`**`print_IC`**`(`*IC*, *out*, *cut_thres=None*, *cut_nan=False*`)`

`fastsemsim.fastsemsim_cmdline.`**`print_err`**`(`**args*`)`

fastsemsim.fastsemsim_cmdline.**print_parameters**()
Print the parameters selected

fastsemsim.fastsemsim_cmdline.**save_params_to_file**(*list_file*)
Save parameters to file

fastsemsim.fastsemsim_cmdline.**set_parameters**(*args*)
fill the parameter dictionary with the proper parameters

fastsemsim.fastsemsim_cmdline.**ss_pairs**(*out*)
Pairwise Semantic Similarity

fastsemsim.fastsemsim_cmdline.**ss_pairwise**(*out*)

fastsemsim.fastsemsim_cmdline.**start**()
main routine

2.4 Module contents

Copyright 2011 Marco Mina. All rights reserved.

This file is part of fastSemSim

fastSemSim is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

fastSemSim is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with fastSemSim. If not, see <http://www.gnu.org/licenses/>.

CHAPTER

THREE

INDICES AND TABLES

- *genindex*
- *modindex*
- *search*

f

fastsemsim, 28
fastsemsim.data, 25
fastsemsim.data.dataset, 25
fastsemsim.examples, 26
fastsemsim.examples.load_annotation_corpus, 26
fastsemsim.examples.load_ontology, 26
fastsemsim.fastsemsim_cmdline, 27
fastsemsim.Ontology, 12
fastsemsim.Ontology.AnnotationCorpus, 5
fastsemsim.Ontology.CellOntology, 7
fastsemsim.Ontology.DiseaseOntology, 7
fastsemsim.Ontology.FFOntology, 7
fastsemsim.Ontology.GAF2AnnotationCorpus, 8
fastsemsim.Ontology.GeneOntology, 10
fastsemsim.Ontology.GOAnnotationCorpus, 8
fastsemsim.Ontology.ontologies, 11
fastsemsim.Ontology.Ontology, 10
fastsemsim.Ontology.PlainAnnotationCorpus, 11
fastsemsim.SemSim, 24
fastsemsim.SemSim.avgSemSim, 24
fastsemsim.SemSim.BMASemSim, 13
fastsemsim.SemSim.CosineSemSim, 13
fastsemsim.SemSim.CzekanowskiDiceSemSim, 14
fastsemsim.SemSim.DiceSemSim, 14
fastsemsim.SemSim.GSESAMESemSim, 15
fastsemsim.SemSim.JaccardSemSim, 15
fastsemsim.SemSim.JiangConrathSemSim, 16
fastsemsim.SemSim.LinSemSim, 16
fastsemsim.SemSim.maxSemSim, 24
fastsemsim.SemSim.MixSemSim, 16
fastsemsim.SemSim.ObjSemSim, 17
fastsemsim.SemSim.ObjSetSemSim, 17
fastsemsim.SemSim.ResnikSemSim, 18
fastsemsim.SemSim.SemSimUtils, 18
fastsemsim.SemSim.SetSemSim, 19
fastsemsim.SemSim.SimGICSemSim, 19
fastsemsim.SemSim.SimICNDSemSim, 20
fastsemsim.SemSim.SimICNPSemSim, 20
fastsemsim.SemSim.SimICSemSim, 21
fastsemsim.SemSim.SimNTOSemSim, 21
fastsemsim.SemSim.SimRelSemSim, 22
fastsemsim.SemSim.SimTOSemSim, 22
fastsemsim.SemSim.SimUISemSim, 23
fastsemsim.SemSim.TermSemSim, 23

O

Ontology, 3

S

SemSim, 3

A

alt_id_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
alt_id_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
alt_ids (fastsemsim.Ontology.CellOntology.CellOntology attribute), 7
alt_ids (fastsemsim.Ontology.DiseaseOntology.DiseaseOntology attribute), 7
alt_ids (fastsemsim.Ontology.FFOntology.FFOntology attribute), 8
AnnotationCorpus (class in fastsemsim.Ontology.AnnotationCorpus), 5
AnnotationCorpus.ECFilter (class in fastsemsim.Ontology.AnnotationCorpus), 5
AnnotationCorpus.GOFilter (class in fastsemsim.Ontology.AnnotationCorpus), 5
AnnotationCorpus.TaxonomyFilter (class in fastsemsim.Ontology.AnnotationCorpus), 6
annotations (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
annotations_field2pos (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
annotations_fields (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
avgSemSim (class in fastsemsim.SemSim.avgSemSim), 24

B

BMASemSim (class in fastsemsim.SemSim.BMASemSim), 13
build_cmdline_args_parser() (in module fastsemsim.fastsemsim_cmdline), 27

C

CellOntology (class in fastsemsim.Ontology.CellOntology), 7
characters() (fastsemsim.Ontology.ontologies.OboXmlParser method), 12
check_parameters() (in module fastsemsim.fastsemsim_cmdline), 27
comment_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
comment_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
consider_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
consider_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
constrain() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
constrain() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorp method), 9
CosineSemSim (class in fastsemsim.SemSim.CosineSemSim), 13
CzekanowskiDiceSemSim (class in fastsemsim.SemSim.CzekanowskiDiceSemSim), 14

D

Dataset (class in fastsemsim.data.dataset), 25
debug (fastsemsim.Ontology.Ontology.Ontology attribute), 10
def_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
def_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
delimiter_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
delimiter_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
det_ancestors_union() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
det_common_ancestors() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
det_IC() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18

det_IC_table() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
det_MICA() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
det_roots() (fastsemsim.Ontology.Ontology.Ontology method), 10
det_ss() (in module fastsemsim.fastsemsim_cmdline), 27
DiceSemSim (class in fastsemsim.SemSim.DiceSemSim), 14
difference() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
DiseaseOntology (class in fastsemsim.Ontology.DiseaseOntology), 7
dotprod() (fastsemsim.SemSim.CosineSemSim.CosineSemSim method), 13

E

EC (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.ECFilter attribute), 5
EC (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.ECFilter attribute), 9
edge_number() (fastsemsim.Ontology.Ontology.Ontology method), 10
endElement() (fastsemsim.Ontology.ontologies.OboXmlParser method), 12
extend_annotations (fastsemsim.SemSim.CosineSemSim.CosineSemSim attribute), 13
extend_annotations (fastsemsim.SemSim.CzekanowskiDiceSemSim.CzekanowskiDiceSemSim attribute), 14
extend_annotations (fastsemsim.SemSim.DiceSemSim.DiceSemSim attribute), 14
extend_annotations (fastsemsim.SemSim.JaccardSemSim.JaccardSemSim attribute), 16
extend_annotations (fastsemsim.SemSim.SimNTOSemSim.SimNTOSemSim attribute), 22

F

fair (fastsemsim.SemSim.BMASemSim.BMASemSim attribute), 13
fastsemsim (module), 28
fastsemsim.data (module), 25
fastsemsim.data.dataset (module), 25
fastsemsim.examples (module), 26
fastsemsim.examples.load_annotation_corpus (module), 26
fastsemsim.examples.load_ontology (module), 26
fastsemsim.fastsemsim_cmdline (module), 27
fastsemsim.Ontology (module), 12
fastsemsim.Ontology.AnnotationCorpus (module), 5
fastsemsim.Ontology.CellOntology (module), 7
fastsemsim.Ontology.DiseaseOntology (module), 7
fastsemsim.Ontology.FFOntology (module), 7
fastsemsim.Ontology.GAF2AnnotationCorpus (module), 8
fastsemsim.Ontology.GeneOntology (module), 10
fastsemsim.Ontology.GOAnnotationCorpus (module), 8
fastsemsim.Ontology.ontologies (module), 11
fastsemsim.Ontology.Ontology (module), 10
fastsemsim.Ontology.PlainAnnotationCorpus (module), 11
fastsemsim.SemSim (module), 24
fastsemsim.SemSim.avgSemSim (module), 24
fastsemsim.SemSim.BMASemSim (module), 13
fastsemsim.SemSim.CosineSemSim (module), 13
fastsemsim.SemSim.CzekanowskiDiceSemSim (module), 14
fastsemsim.SemSim.DiceSemSim (module), 14
fastsemsim.SemSim.GSESAMESemSim (module), 15
fastsemsim.SemSim.JaccardSemSim (module), 15
fastsemsim.SemSim.JiangConrathSemSim (module), 16
fastsemsim.SemSim.LinSemSim (module), 16
fastsemsim.SemSim.maxSemSim (module), 24
fastsemsim.SemSim.MixSemSim (module), 16
fastsemsim.SemSim.ObjSemSim (module), 17
fastsemsim.SemSim.ObjSetSemSim (module), 17
fastsemsim.SemSim.ResnikSemSim (module), 18
fastsemsim.SemSim.SemSimUtils (module), 18
fastsemsim.SemSim.SetSemSim (module), 19
fastsemsim.SemSim.SimGICSemSim (module), 19
fastsemsim.SemSim.SimICNDSemSim (module), 20
fastsemsim.SemSim.SimICNPSemSim (module), 20
fastsemsim.SemSim.SimICSemSim (module), 21
fastsemsim.SemSim.SimNTOSemSim (module), 21
fastsemsim.SemSim.SimRelSemSim (module), 22
fastsemsim.SemSim.SimTOSemSim (module), 22
fastsemsim.SemSim.SimUISemSim (module), 23
fastsemsim.SemSim.TermSemSim (module), 23
FFOntology (class in fastsemsim.Ontology.FFOntology), 8
filter() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.ECFilte method), 5
filter() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.GOFilte method), 5
filter() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.Taxonor method), 6
filter() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.E method), 9
filter() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.G method), 9

filter() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
find_next_term() (fastsemsim.Ontology.ontologies.OboParser method), 11
format_and_check_data (fastsemsim.SemSim.TermSemSim.TermSemSim attribute), 24

G

G_TSS (fastsemsim.SemSim.TermSemSim.TermSemSim attribute), 23
GAF2AnnotationCorpus (class in fastsemsim.Ontology.GAF2AnnotationCorpus), 8
gen_error (fastsemsim.Ontology.Ontology.Ontology attribute), 10
GeneOntology (class in fastsemsim.Ontology.GeneOntology), 10
generic_score (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim attribute), 15
generic_score (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim attribute), 20
generic_score (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim attribute), 21
get_ancestors() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
get_annotation_corpus() (fastsemsim.data.dataset.Dataset method), 25
get_annotation_corpus_by_species() (fastsemsim.data.dataset.Dataset method), 25
get_dataset() (fastsemsim.data.dataset.Dataset method), 25
get_default_annotation_corpus() (fastsemsim.data.dataset.Dataset method), 25
get_default_ontology() (fastsemsim.data.dataset.Dataset method), 25
get_ontology() (fastsemsim.data.dataset.Dataset method), 25
GO (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.GOFilter attribute), 5
GO (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.GOFilter attribute), 9
GOAnnotationCorpus (class in fastsemsim.Ontology.GOAnnotationCorpus), 9
GOAnnotationCorpus.ECFilter (class in fastsemsim.Ontology.GOAnnotationCorpus), 9
GOAnnotationCorpus.GOFilter (class in fastsemsim.Ontology.GOAnnotationCorpus), 9
GOAnnotationCorpus.TaxonomyFilter (class in fastsemsim.Ontology.GOAnnotationCorpus), 9
GSESAMESemSim (class in fastsemsim.SemSim.GSESAMESemSim), 15

H

has_tag_structure() (fastsemsim.Ontology.ontologies.OboParser method), 11

I

IC_based (fastsemsim.SemSim.CosineSemSim.CosineSemSim attribute), 13
IC_based (fastsemsim.SemSim.CzekanowskiDiceSemSim.CzekanowskiDic attribute), 14
IC_based (fastsemsim.SemSim.DiceSemSim.DiceSemSim attribute), 14
IC_based (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim attribute), 15
IC_based (fastsemsim.SemSim.JaccardSemSim.JaccardSemSim attribute), 15
IC_based (fastsemsim.SemSim.JiangConrathSemSim.JiangConrathSemSim attribute), 16
IC_based (fastsemsim.SemSim.LinSemSim.LinSemSim attribute), 16
IC_based (fastsemsim.SemSim.ResnikSemSim.ResnikSemSim attribute), 18
IC_based (fastsemsim.SemSim.SimGICSemSim.SimGICSemSim attribute), 19
IC_based (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim attribute), 20
IC_based (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim attribute), 21
IC_based (fastsemsim.SemSim.SimICSemSim.SimICSemSim attribute), 21
IC_based (fastsemsim.SemSim.SimNTOSemSim.SimNTOSemSim attribute), 22
IC_based (fastsemsim.SemSim.SimRelSemSim.SimRelSemSim attribute), 22
IC_based (fastsemsim.SemSim.SimTOSemSim.SimTOSemSim attribute), 23
IC_based (fastsemsim.SemSim.SimUISemSim.SimUISemSim attribute), 23
IC_based (fastsemsim.SemSim.TermSemSim.TermSemSim attribute), 23
ICNDSemSim (class in fastsemsim.SemSim.SimICNDSemSim), 20
ICNPSemSim (class in fastsemsim.SemSim.SimICNPSemSim), 20
id2name() (fastsemsim.Ontology.FFOntology.FFOntology method), 8
id2node() (fastsemsim.Ontology.Ontology.Ontology method), 10

id_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
id_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
inclusive (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.methodFilter attribute), 5
inclusive (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.methodFilter attribute), 5
inclusive (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.TaxonomyFilter attribute), 6
inclusive (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.ECFilter attribute), 9
inclusive (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.GOFilter attribute), 9
inclusive (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.TaxonomyFilter attribute), 9
init_parameters() (in module fastsemsim.fastsemsim_cmdline), 27
init_ss() (in module fastsemsim.fastsemsim_cmdline), 27
initCommonFilter() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
initCommonFilter() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
int_checkConsistency() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
int_checkConsistency() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
int_comment (fastsemsim.Ontology.GAF2AnnotationCorpus.GAF2AnnotationCorpus attribute), 8
int_det_ancestors() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
int_det_ancestors_table() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
int_det_freq() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
int_det_freq_table() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
int_det_IC() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
int_det_IC_table() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 18
int_det_lineage() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
int_det_offspring() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
int_det_offspring_table() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
int_det_p() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
int_det_p_table() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
int_excludeCorpus_ECFilter (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus attribute), 9
int_go (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.GOFilter attribute), 5
int_go (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.GOFilter attribute), 9
int_interpretParameters() (fastsemsim.Ontology.GAF2AnnotationCorpus.GAF2AnnotationCorpus method), 8
int_interpretParameters() (fastsemsim.Ontology.PlainAnnotationCorpus.PlainAnnotationCorpus method), 11
int_merge_sets() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
int_resetFields() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
int_resetFields() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
int_separator (fastsemsim.Ontology.GAF2AnnotationCorpus.GAF2AnnotationCorpus attribute), 8
intersection() (fastsemsim.SemSim.SemSimUtils.SemSimUtils method), 19
is_a_score (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim attribute), 15
is_a_score (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim attribute), 20
is_a_score (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim attribute), 21
is_a_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
is_a_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
is_consistent() (fastsemsim.Ontology.Ontology.Ontology method), 10
is_obsolete_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
is_obsolete_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12

is_valid() (fastsemsim.Ontology.Ontology.Ontology method), 10
isConsistent() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
isConsistent() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
isOk() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
isOk() (fastsemsim.Ontology.GAF2AnnotationCorpus.GAF2AnnotationCorpus method), 8
isOk() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
isOk() (fastsemsim.Ontology.PlainAnnotationCorpus.PlainAnnotationCorpus method), 11

J

JaccardSemSim (class in fastsemsim.SemSim.JaccardSemSim), 15
JiangConrathSemSim (class in fastsemsim.SemSim.JiangConrathSemSim), 16

L

LinSemSim (class in fastsemsim.SemSim.LinSemSim), 16
load() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
load() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
load() (in module fastsemsim.Ontology.ontologies), 12
load_ac() (in module fastsemsim.fastsemsim_cmdline), 27
load_IC_from_file() (in module fastsemsim.fastsemsim_cmdline), 27
load_ontology() (in module fastsemsim.fastsemsim_cmdline), 27
load_params_from_file() (in module fastsemsim.fastsemsim_cmdline), 27
load_query() (in module fastsemsim.fastsemsim_cmdline), 27
load_query_from_file() (in module fastsemsim.fastsemsim_cmdline), 27

M

maxSemSim (class in fastsemsim.SemSim.maxSemSim), 24
MissingAcException, 23
MixSemSim (class in fastsemsim.SemSim.MixSemSim), 17

N

name (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.ECFilter attribute), 5
name (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.GOFilter attribute), 5
name (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.Taxonom attribute), 6
name (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.E attribute), 9
name (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.G attribute), 9
name (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.Ta attribute), 9
name2id() (fastsemsim.Ontology.FFOntology.FFOntology method), 8
name2id() (fastsemsim.Ontology.Ontology.Ontology method), 10
name_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
name_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
namespace_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
namespace_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
neg_regulates_score (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim attribute), 15
neg_regulates_score (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim attribute), 20
neg_regulates_score (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim attribute), 21
node2id() (fastsemsim.Ontology.Ontology.Ontology method), 10
node_number() (fastsemsim.Ontology.Ontology.Ontology method), 10

O

obj_field2pos (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
obj_fields (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
obj_set (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
ObjSemSim (class in fastsemsim.SemSim.ObjSemSim), 17
ObjSetSemSim (class in fastsemsim.SemSim.ObjSetSemSim), 17
OboParser (class in fastsemsim.Ontology.ontologies), 11
OboXmlParser (class in fastsemsim.Ontology.ontologies), 12

obsolete_ids (fastsemsim.Ontology.CellOntology.CellOntology attribute), 7
obsolete_ids (fastsemsim.Ontology.DiseaseOntology.DiseaseOntology attribute), 7
obsolete_ids (fastsemsim.Ontology.FFOntology.FFOntology attribute), 8
Ontology (class in fastsemsim.Ontology.Ontology), 10
Ontology (in module Ontology), 3
Ontology (module), 3

P

P_TSS (fastsemsim.SemSim.TermSemSim.TermSemSim attribute), 23
parse() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
parse() (fastsemsim.Ontology.GAF2AnnotationCorpus.GAF2AnnotationCorpus method), 8
parse() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
parse() (fastsemsim.Ontology.ontologies.OboParser method), 11
parse() (fastsemsim.Ontology.PlainAnnotationCorpus.PlainAnnotationCorpus method), 11
parse() (in module fastsemsim.Ontology.ontologies), 12
part_of_score (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim attribute), 15
part_of_score (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim attribute), 20
part_of_score (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim attribute), 21
part_of_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
PlainAnnotationCorpus (class in fastsemsim.Ontology.PlainAnnotationCorpus), 11
populate() (fastsemsim.data.dataset.Dataset method), 25
pos_regulates_score (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim attribute), 15
pos_regulates_score (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim attribute), 20
pos_regulates_score (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim attribute), 21
prbool() (in module fastsemsim.fastsemsim_cmdline), 27
print_err() (in module fastsemsim.fastsemsim_cmdline), 27
print_IC() (in module fastsemsim.fastsemsim_cmdline), 27
print_parameters() (in module fastsemsim.fastsemsim_cmdline), 27

R

regulates_score (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim attribute), 15
regulates_score (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim attribute), 20
regulates_score (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim attribute), 21
relationship_delimiter_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
relationship_delimiter_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
relationship_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
relationship_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
relationship_to_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
relationship_type_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
replaced_by_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 11
replaced_by_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
reset() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
reset() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
resetCommonfilter() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
resetCommonfilter() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
resetFilter() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
resetFilter() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
ResnikSemSim (class in fastsemsim.SemSim.ResnikSemSim), 18
reverse_annotations (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
reverse_annotations_field2pos (fastsem-

sim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
reverse_annotations_fields (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6

S

sanitize() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
sanitize() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
save_params_to_file() (in module fastsemsim.fastsemsim_cmdline), 28
score_ancestors() (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim method), 15
score_ancestors() (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim method), 20
score_ancestors() (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim method), 21
score_edge() (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim method), 15
score_edge() (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim method), 20
score_edge() (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim method), 21
select_mix_SemSim() (in module fastsemsim.SemSim), 25
select_term_SemSim() (in module fastsemsim.SemSim), 25
SemSim (module), 3
SemSim() (fastsemsim.SemSim.MixSemSim.MixSemSim method), 17
SemSim() (fastsemsim.SemSim.ObjSemSim.ObjSemSim method), 17
SemSim() (fastsemsim.SemSim.ObjSetSemSim.ObjSetSemSim method), 17
SemSim() (fastsemsim.SemSim.SetSemSim.SetSemSim method), 19
SemSim() (fastsemsim.SemSim.TermSemSim.TermSemSim method), 23
SemSimUtils (class in fastsemsim.SemSim.SemSimUtils), 18
set() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.GOFilter method), 6
set() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.GOFilter method), 9
set_parameters() (in module fastsemsim.fastsemsim_cmdline), 28
setCommonfilters() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
setCommonfilters() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus method), 9
setFields() (fastsemsim.Ontology.GAF2AnnotationCorpus.GAF2Annotation method), 8
setFields() (fastsemsim.Ontology.PlainAnnotationCorpus.PlainAnnotationC method), 11
setFilter() (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus method), 6
setFilter() (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpu method), 9
setSanityCheck() (fastsemsim.SemSim.TermSemSim.TermSemSim method), 24
SetSemSim (class in fastsemsim.SemSim.SetSemSim), 19
SimGICSemSim (class in fastsemsim.SemSim.SimGICSemSim), 19
SimICSemSim (class in fastsemsim.SemSim.SimICSemSim), 21
SimNTOSemSim (class in fastsemsim.SemSim.SimNTOSemSim), 22
SimRelSemSim (class in fastsemsim.SemSim.SimRelSemSim), 22
SimTOSemSim (class in fastsemsim.SemSim.SimTOSemSim), 22
SimUISemSim (class in fastsemsim.SemSim.SimUISemSim), 23
split_rel_tag() (fastsemsim.Ontology.ontologies.OboParser method), 12
split_tag() (fastsemsim.Ontology.ontologies.OboParser method), 12
ss_pairs() (in module fastsemsim.fastsemsim_cmdline), 28
ss_pairwise() (in module fastsemsim.fastsemsim_cmdline), 28
SS_type (fastsemsim.SemSim.CosineSemSim.CosineSemSim attribute), 13
SS_type (fastsemsim.SemSim.CzekanowskiDiceSemSim.CzekanowskiDice attribute), 14
SS_type (fastsemsim.SemSim.DiceSemSim.DiceSemSim attribute), 14
SS_type (fastsemsim.SemSim.GSESAMESemSim.GSESAMESemSim attribute), 15
SS_type (fastsemsim.SemSim.JaccardSemSim.JaccardSemSim attribute), 15
SS_type (fastsemsim.SemSim.JiangConrathSemSim.JiangConrathSemSim attribute), 16
SS_type (fastsemsim.SemSim.LinSemSim.LinSemSim attribute), 16
SS_type (fastsemsim.SemSim.ResnikSemSim.ResnikSemSim attribute), 18
SS_type (fastsemsim.SemSim.SimGICSemSim.SimGICSemSim

attribute), 20
SS_type (fastsemsim.SemSim.SimICNDSemSim.ICNDSemSim attribute), 20
SS_type (fastsemsim.SemSim.SimICNPSemSim.ICNPSemSim attribute), 21
SS_type (fastsemsim.SemSim.SimICSemSim.SimICSemSim attribute), 21
SS_type (fastsemsim.SemSim.SimNTOSemSim.SimNTOSemSim attribute), 22
SS_type (fastsemsim.SemSim.SimRelSemSim.SimRelSemSim attribute), 22
SS_type (fastsemsim.SemSim.SimTOSemSim.SimTOSemSim attribute), 23
SS_type (fastsemsim.SemSim.SimUISemSim.SimUISemSim attribute), 23
SS_type (fastsemsim.SemSim.TermSemSim.TermSemSim attribute), 23
start() (in module fastsemsim.fastsemsim_cmdline), 28
startElement() (fastsemsim.Ontology.ontologies.OboXmlParser method), 12

T

taxonomy (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus.TaxonomyFilter attribute), 6
taxonomy (fastsemsim.Ontology.GOAnnotationCorpus.GOAnnotationCorpus.TaxonomyFilter attribute), 9
term_field2pos (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
term_fields (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
term_SemSim_measures (in module fastsemsim.SemSim), 25
term_set (fastsemsim.Ontology.AnnotationCorpus.AnnotationCorpus attribute), 6
term_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 12
term_tag (fastsemsim.Ontology.ontologies.OboXmlParser attribute), 12
TermSemSim (class in fastsemsim.SemSim.TermSemSim), 23
typedef_tag (fastsemsim.Ontology.ontologies.OboParser attribute), 12

U

use_Lin (fastsemsim.SemSim.SimICSemSim.SimICSemSim attribute), 21
use_Lin (fastsemsim.SemSim.SimRelSemSim.SimRelSemSim attribute), 22