

RFuzzy

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Table of Contents

rfuzzy	1
Usage and interface	1
Other information	1
Known bugs and planned improvements	1
References	3
Library/Module Index	5
Predicate/Method Index	7
Property Index	9
Regular Type Index	11
Declaration Index	13
Concept Index	15
Author Index	17
Global Index	19

rfuzzy

This package implements an extension of Prolog to deal with uncertainty. Consult the following papers for detailed information about the semantics:

- [MHPCS10]
- [VAS10]
- [ASV10]
- [SMHP09]
- [MHPS09]
- [PSM09]
- [PMS08]

Usage and interface

- **Library usage:**
`:- use_package(rfuzzy).`
or
`:- module(...,[rfuzzy]).`
- **Imports:**
 - *Internal (engine) modules:*
`term_basic, arithmetic, atomic_basic, basic_props, basiccontrol, data_facts, exceptions, io_aux, io_basic, prolog_flags, streams_basic, system_info, term_compare, term_typing, hiord_rt, debugger_support.`
 - *Packages:*
`prelude, nonpure, condcomp, assertions, regtypes.`

Other information

An example program:

```
@includeverbatim{examples/ex_good_player.pl}
```

There are more examples in the subdirectory `examples` of the distribution.

Known bugs and planned improvements

- Documentation is mostly missing

References

- [ASV10] Ivá­ro Fernandez-Dıaz, Susana Muoz-Hernandez, and Vıctor Pablos-Ceruelo. Developing user-sensitive e-commerce applications from fuzzy concepts. In *Algebraic methods, soft computing, and program verification*, International Center for Mathematical Meetings (CIEM), Castro Urdiales, Cantabria, Spain, April 2010. Julio Rubio (Univ. de La Rioja) and Manuel Ojeda-Aciego (Univ. de Mlaga). Sponsored by: Ingenio2010, CIEM, Excmo. Ayuntamiento de Castro Urdiales. Keynote Speakers: Thomas Arts (Univ. of Gothenburg), Gilles Barthe (Madrid Institute for Advanced Studies (Software)), Stefan Berghofer (Technische Universitt Mnchen), Mario de Jess Prez Jimnez (Univ. de Sevilla), Jos Luis Ruiz Reina (Univ. de Sevilla), Enric Trillas (European Centre for Soft Computing).
- [MHPCS10] Susana Muoz-Hernandez, Vctor Pablos-Ceruelo, and Hannes Strass. Rfuzzy: Syntax, semantics and implementation details of a simple and expressive fuzzy tool over prolog. *Information Sciences*, In Press, Accepted Manuscript:–, 2010.
- [MHPS09] Susana Muoz-Hernandez, Vctor Pablos-Ceruelo, and Hannes Strass. Rfuzzy: An expressive simple fuzzy compiler. In Joan Cabestany, Francisco Sandoval, Alberto Prieto, and Juan M. Corchado, editors, *IWANN (1)*, volume 5517 of *Lecture Notes in Computer Science*, pages 270–277. Springer, 2009.
- [PMS08] Vctor Pablos-Ceruelo, Susana Muoz Hernandez, and Hannes Strass. Rfuzzy framework. In Puri Arenas and Damiano Zanardini, editors, *18th Workshop on Logic-based methods in Programming Environments, WLPE 2008*, pages 62–76, Udine, Italy, December 2008.
- [PSM09] Vctor Pablos-Ceruelo, Hannes Strass, and Susana Muoz Hernandez. Rfuzzy—a framework for multi-adjoint fuzzy logic programming. In *Fuzzy Information Processing Society, 2009. NAFIPS 2009. Annual Meeting of the North American Fuzzy Information Processing Society Annual Conference*, pages 1–6, Cincinnati, Ohio, USA, June 2009.
- [SMHP09] Hannes Strass, Susana Muoz-Hernandez, and Vctor Pablos-Ceruelo. Operational semantics for a fuzzy logic programming system with defaults and constructive answers. In Joo Paulo Carvalho, Didier Dubois, Uzay Kaymak, and Joo Miguel da Costa Sousa, editors, *IFSA/EUSFLAT Conf.*, pages 1827–1832, 2009.
- [VAS10] Vctor Pablos-Ceruelo, Ivro Fernandez-Dıaz, and Susana Muoz-Hernandez. Developing user-sensitive search engines from fuzzy concepts. In *JISBD’2010*, September 2010.
accepted for publication, see
<http://www.dsic.upv.es/conferences/jisbd2010/articulos.shtml>.

Library/Module Index

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Predicate/Method Index

(Index is empty)

Property Index

(Index is empty)

Regular Type Index

(Index is empty)

Declaration Index

(Index is empty)

Concept Index

(Index is empty)

Author Index

(Index is empty)

Global Index

This is a global index containing pointers to places where concepts, predicates, modes, properties, types, applications, etc., are referred to in the text of the document.

A

arithmetic.....	1
assertions.....	1
atomic_basic.....	1

B

basic_props.....	1
basiccontrol.....	1

C

condcomp.....	1
---------------	---

D

data_facts.....	1
debugger_support.....	1

E

exceptions.....	1
-----------------	---

H

hiord_rt.....	1
---------------	---

I

io_aux.....	1
io_basic.....	1

N

nonpure.....	1
--------------	---

P

prelude.....	1
prolog_flags.....	1

R

regtypes.....	1
---------------	---

S

streams_basic.....	1
system_info.....	1

T

term_basic.....	1
term_compare.....	1
term_typing.....	1

