

## 7 Referências Bibliográficas

- [Axis] Axis Home Page. Disponível em: <http://ws.apache.org/axis/>. Acesso em 20 de novembro de 2004.
- [Booch, 1998] G. Booch, I. Jacobson, J. Rumbaugh. The Unified Modeling Language User Guide. Addison-Wesley Pub Co, 1998.
- [Calì, 2004] A. Calì, D. Calvanese, S. Colucci, T. Di Noia, F. M. Donini. A Description Logic Based Approach for Matching User Profiles. In: Proceedings of the 2004 Description Logic Workshop, DL 2004, 2004.
- [Carroll, 2003] J. Carroll, I. Dickinson, C. Dollin, D. Reynolds, A. Seaborne, K. Wilkinson. Jena: Implementing the Semantic Web Recommendations. HP Technical Reports, December 2003.
- [Chandrasekaran, 1999] B. Chandrasekaran, J. R. Josephson, V. R. Benjamins. What are Ontologies, and Why do We Need Them?. IEEE Intelligent Systems, January/February 1999, pp. 20–26.
- [Constantinescu, 2003] I. Constantinescu, B. Faltings. Efficient Matchmaking and Discovery Services. In: Proceedings of the IEEE/WIC International Conference on Web Intelligence, WI'03, IEEE, 2003.
- [Cormen, 2002] T. H. Cormen *et al.* Algoritmos: Teoria e Prática. 2ed. Rio de Janeiro: Editora Campus, 2002, 916pp. (Tradução autorizada do idioma inglês da edição publicada por The MIT Press).
- [Cranefield, 1997] S. Cranefield, A. Diaz, M. Purvis. Planning and Matchmaking for the Interoperation of Information Processing Agents. In: The Information Science Discussion Paper Series No. 97/01, University of Otago.
- [DAML, 2000] DAML-ONT Initial Release. Disponível em: <http://www.daml.org/2000/10/daml-ont.html>. Acesso em 20 de novembro de 2004.
- [DAML+OIL, 2001] DAML+OIL (March 2001). Disponível em: <http://www.daml.org/2001/03/daml+oil-index.html>. Acesso em 20 de novembro de 2004.

- [DAML-S] DAML Services Home Page. Disponível em: <http://www.daml.org/services>. Acesso em 20 de novembro de 2004.
- [Decker, 1996] K. Decker, K. Sycara, M. Williamson. Matchmaking and Brokering. In: International Conference on Multi-Agent Systems, ICMAS'96, December 1996.
- [Di Noia, 2003a] T. Di Noia, E. Di Sciascio, F. M. Donini, M. Mongiello. Semantic Matchmaking in a P-2-P Electronic Marketplace. In: Proceedings of the 2003 ACM Symposium on Applied Computing, ACM, March 2003, pp. 582--586.
- [Di Noia, 2003b] T. Di Noia, E. Di Sciascio, F. M. Donini, M. Mongiello. A System for Principled Matchmaking in na Electronic Marketplace. In: Proceedings of the Twelfth International Conference on World Wide Web, WWW 2003, ACM, May 2003, pp. 321--330.
- [Fayad, 1999] M. E. Fayad, D. C. Schmidt, R. E. Johnson. Building Application Frameworks. Addison-Wesley Pub Co, 1st edition, 1999.
- [Fensel, 2001] D. Fensel. Ontologies: Silver Bullet for Knowledge Management and Electronic Commerce. Springer Verlag, 1st edition, August 2001.
- [Fensel, 2003] D. Fensel, J. Hendler, H. Liederman. Spinning the Semantic Web: Bringing the World Wide Web to Its Full Potencial. The MIT Press, 2003.
- [Gamma, 1995] E. Gamma, R. Helm, R. Johnson, J. Vlissides. Design Patterns: Elements of Reusable Object-Oriented Software. Addison Wesley Pub Co, 1st edition, January 1995.
- [Goldman, 2003] N. M. Goldman. Ontology-Oriented Programming: Static Typing for the Inconsistent Programmer. In Lecture Notes in Computer Science: The SemanticWeb – ISWC 2003, Springer-Verlag Heidelberg, Volume 2870/2003, October 2003, pp. 850--865.
- [Guarino, 1998] N. Guarino. Formal Ontology and Information Systems. In N. Guarino, editor, Proceedings of the 1st International Conference on Formal Ontologies in Information Systems, FOIS'98, IOS Press, Trento, Italy, June 1998, pp. 3--15.
- [Java] Java Programming Language. Disponível em: <http://java.sun.com>. Acesso em 20 de novembro de 2004.

- [Jena] Jena – A Semantic Web Framework – Home Page. Disponível em: <http://www.hpl.hp.com/semweb/jena2.htm>. Acesso em 20 de novembro de 2004.
- [KAON] KAON Home Page. Disponível em: <http://kaon.semanticweb.org>. Acesso em 20 de novembro de 2004.
- [Lee, 2003a] J. Lee. An Application Programming Interface for Ontology. IBM T. J. Watson Research Center, November 2003.
- [Lee, 2003b] J. Lee, R. Goodwin, Y. Ye, R. Akkiraju. Towards Enterprise-Scale Ontology Management. IBM T. J. Watson Reserch Center, November 2003.
- [Li, 2003] L. Li, I. Horrocks. A Software Framework for Matchmaking Base don Semantic Web Technology. In: Proceedings of the Twelfth International Conference on World Wide Web, WWW 2003, ACM, 2003, pp. 331--339.
- [Lu, 2003] H. Lu. Ontology-Based Agent Services Description and Matchmaking on the World Wide Web. In: Proceedings of the Third Australian World Wide Web Conference, AusWeb'03, July 2003.
- [Ludwig, 2002] S. A. Ludwig, P. van Santen. A Grid Service Discovery Matchmaker Based on Ontology Description. In: EuroWeb 2002 Conference, Session 1: The Semantic Web and the Grid, December 2002.
- [Machado, 2004] R. P. Machado, L. G. Ferrão, C. Rocha, M. Endler, C. J. P. Lucena. Um Serviço de Combinação de Perfis baseado em Ontologias para Colaboração Espontânea entre Usuários Móveis. In: VI Workshop de Comunicação sem Fio e Computação Móvel, Fortaleza, Outubro 2004.
- [McBride, 2002] B. McBride. Jena: A Semantic Web Toolkit. IEEE Internet Computing, November 2002.
- [Milestone, 2004] Milestone TI. The Mathing Module Project – An Overview of the Matching Module. Technical Reports, June 2004. Disponível em: <http://www.lac.inf.puc-rio.br/~ferrao/matchingmodule/overview.pdf>. Acesso em: 20 de novembro de 2004.
- [Nardi, 2002] D. Nardi, R. J. Brachman. An Introduction to Description Logics. In: The Description Logic Handbook. Edited by F. Baader, D. Calvanese, D. L. McGuinness, D. Nardi, P. F. Patel-Schneider, Cambridge University Press, 2002, pp. 5--44.

- [OIL, 2000] OIL Home Page. Disponível em: <http://oil.semanticweb.org>. Acesso em 20 de novembro de 2004.
- [OpenTS] OpenTS – Open Tabu Search Framework – Home Page. Disponível em: <http://www.coin-or.org/OpenTS/>. Acesso em 20 de novembro de 2004.
- [Ouksel, 2004] A. M. Ouksel, Y. M. Babad, T. Tesch. Matchmaking Software Agents in B2B Markets. In: Proceedings of the 37th Annual Hawaii International Conference on System Sciences, HICSS'04, 2004.
- [Paolucci, 2002] M. Paolucci, T. Kawamura, T. R. Payne, K. Sycara. Semantic Matching of Web Services Capabilities. In: The Semantic Web – ISWC 2002, No. 2342 in LNCS, Springer-Verlag, 2002, pp. 333-347.
- [Pothipruk, 2002] P. Pothipruk, P. Lalitrojwong. An Ontology-Based Multi-Agent System for Matchmaking. In: Proceedings of the First International Conference on Information Technology and Applications, ICITA 2002, November 2002, pp. 25--28.
- [Raman, 1999] R. Raman, M. Livny, M. Solomon. Matchmaking: An Extensible Framework for Distributed Resource Management. Cluster Computing, No. 2 (2), 1999, pp. 129--138.
- [Seaborne, 2002] A. Seaborne. An RDF NetAPI. In: Semantic Web Workshop, Hawaii, USA, 2002.
- [Sintek, 2001] M. Sintek, S. Decker. TRIPLE: An RDF Query, Inference, and Transformation Language. In: Proceedings of the International Conference on Applications of Prolog, Tóquio, Japan, 2001.
- [SOFA] SOFA Home Page. Disponível em: <http://sofa.dev.java.net>. Acesso em 20 de dezembro de 2004.
- [Sycara, 1999] K. Sycara, J. Lu, M. Klusch, S. Widoff. Dynamic Service Matchmaking Among Agents in Open Information Environments. ACM SIGMOD Record 28 (1), Special Issue on Semantic Interoperability in Global Information Systems, 1999, pp. 47--53.
- [Tomcat] Apache Tomcat Home Page. Disponível em: <http://jakarta.apache.org/tomcat/>. Acesso em 20 de novembro de 2004.
- [Trastour, 2001] J. González-Castillo, D. Trastour, C. Bartolini. Description Logics for Matchmaking of Services. In: Proceedings of Workshop on Application of Description Logics, September 2001.

- [VCARD] VCARD Ontology Home Page, Disponível em: <http://www.hlp.hp.com/semweb/iswc2002/JenaTutorial.Alpha/DAML/solution/s/vcard-daml.rdf>. Acesso em 20 de novembro de 2004.
- [Veit, 2001a] D. Veit, J. P. Muller, M. Schneider, B. Fiehn. Matchmaking for Autonomous Agents in Electronic Marketplaces. In: Proceedings of the Fifth International Conference on Autonomous Agents, AGENTS'01, Montreal, Canadá, 2001, pp. 65--66.
- [Veit, 2001b] T. Eiter, D. Veit, J. P. Muller, M. Schneider. Matchmaking for Structured Objects. In: Proceedings of the Third International Conference on Data Warehousing and Knowledge Discovery, DaWaK 2001, Springer-Verlag, September 2001, pp. 186--194.
- [Volz, 2003] R. Volz, D. Oberle, S. Staab, B. Motik. KAON Server – A Semantic Web Management System. In: Proceedings of the Twelfth International World Wide Web, WWW 2003, ACM, May 2003, pp. 20--24.
- [W3C, 2004a] RDF Primer. W3C Recommendation 10 February 2004. Disponível em: <http://www.w3.org/TR/2004/REC-rdf-primer-20040210/>. Acesso em 20 de novembro de 2004.
- [W3C, 2004b] Resource Description Framework (RDF): Concepts and Abstract Syntax. W3C Recommendation 10 February 2004. Disponível em: <http://www.w3.org/TR/2004/REC-rdf-concepts-20040210/>. Acesso em 20 de novembro de 2004.
- [W3C, 2004c] RDF Vocabulary Description Language 1.0: RDF Schema. W3C Recommendation 10 February 2004. Disponível em: <http://www.w3.org/TR/2004/REC-rdf-schema-20040210/>. Acesso em 20 de novembro de 2004.
- [W3C, 2004d] RDF/XML Syntax Specification (Revised). W3C Recommendation 10 February 2004. Disponível em: <http://www.w3.org/TR/2004/REC-rdf-syntax-grammar-20040210/>. Acesso em 20 de novembro de 2004.
- [W3C, 2004e] OWL Web Ontology Language: Guide. W3C Recommendation 10 February 2004. Disponível em: <http://www.w3.org/TR/2004/REC-owl-guide-20040210/>. Acesso em 20 de novembro de 2004.
- [W3C, 2004f] OWL Web Ontology Language: Overview. W3C Recommendation 10 February 2004. Disponível em: <http://www.w3.org/TR/2004/REC-owl-features-20040210/>. Acesso em 20 de novembro de 2004.

[W3C, 2004g] OWL Web Ontology Language: Reference. W3C Recommendation 10 February 2004. Disponível em: <http://www.w3.org/TR/2004/REC-owl-ref-20040210/>. Acesso em 20 de novembro de 2004.

[Zaremski, 1997] A. M. Zaremski, J. M. Wing. Specification Matching of Software Components. In: ACM Transactions on Software Engineering and Methodology, Vol. 6, No. 4, October 1997, pp. 333--369.

## Anexo A

URI: <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-rdfs/person.rdfs>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY xsd "http://www.w3.org/2001/XMLSchema#">
  <!ENTITY courses "http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#">
  <!ENTITY aulanet "http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/aulanet.rdfs#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xml:base="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/person.rdfs#">

  <rdfs:Class rdf:ID="Person"/>

  <rdfs:Class rdf:ID="Trainee">
    <rdfs:subClassOf rdf:resource="#Person"/>
  </rdfs:Class>
  <rdfs:Class rdf:ID="Employee">
    <rdfs:subClassOf rdf:resource="#Person"/>
  </rdfs:Class>

  <rdf:Property rdf:ID="name">
    <rdfs:domain rdf:resource="#Person"/>
    <rdfs:range rdf:resource="&xsd:string"/>
  </rdf:Property>

  <rdf:Property rdf:ID="requires">
    <rdfs:domain rdf:resource="#Person"/>
    <rdfs:range rdf:resource="&aulanet;Competency"/>
  </rdf:Property>

  <rdf:Property rdf:ID="hasCoursed">
    <rdfs:domain rdf:resource="#Person"/>
    <rdfs:range rdf:resource="&courses;Course"/>
  </rdf:Property>

</rdf:RDF>
```

URI: <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-rdfs/course.rdfs>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY xsd "http://www.w3.org/2001/XMLSchema#">
  <!ENTITY aulanet "http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/aulanet.rdfs#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xml:base="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#">

  <rdfs:Class rdf:ID="Course"/>

  <rdf:Property rdf:ID="name">
    <rdfs:domain rdf:resource="#Course"/>
    <rdfs:range rdf:resource="&xsd:string"/>
  </rdf:Property>

  <rdf:Property rdf:ID="price">
    <rdfs:domain rdf:resource="#Course"/>
    <rdfs:range rdf:resource="&xsd:double"/>
  </rdf:Property>

  <rdf:Property rdf:ID="develops">
    <rdfs:domain rdf:resource="#Course"/>
  </rdf:Property>
```

```
<rdfs:range rdf:resource="aulanet;Competency"/>
</rdf:Property>

<rdf:Property rdf:ID="preRequisite">
  <rdfs:domain rdf:resource="#Course"/>
  <rdfs:range rdf:resource="#Course"/>
</rdf:Property>

</rdf:RDF>
```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-rdfs/aulanet.rdfs>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [<!ENTITY xsd "http://www.w3.org/2001/XMLSchema#">]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xml:base="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/aulanet.rdfs#">

  <rdfs:Class rdf:ID="Competency"/>

  <rdf:Property rdf:ID="name">
    <rdfs:domain rdf:resource="#Competency"/>
    <rdfs:range rdf:resource="xsd:string"/>
  </rdf:Property>

</rdf:RDF>
```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/people/luis.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:person="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/person.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/luis.rdf#">

  <person:Person          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/luis.rdf">
    <person:name>Luis</person:name>
    <person:requires rdf:resource="&competencies;Competency2" />
    <person:requires rdf:resource="&competencies;Competency5" />
    <person:requires rdf:resource="&competencies;Competency9" />
    <person:requires rdf:resource="&competencies;Competency11" />
    <person:hasCoursed          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course1.rdf" />
  </person:Person>

</rdf:RDF>
```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/people/maria.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:person="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/person.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/maria.rdf#">

  <person:Person          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/maria.rdf">
    <person:name>Maria</person:name>
    <person:requires rdf:resource="&competencies;Competency2" />
    <person:requires rdf:resource="&competencies;Competency5" />
    <person:requires rdf:resource="&competencies;Competency8" />
    <person:requires rdf:resource="&competencies;Competency9" />
    <person:requires rdf:resource="&competencies;Competency11" />
    <person:hasCoursed          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course1.rdf" />
  </person:Person>

</rdf:RDF>
```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/people/antonio.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:person="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/person.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/antonio.rdf#">

  <person:Person          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/antonio.rdf">
    <person:name>Antonio</person:name>
    <person:requires rdf:resource="&competencies;Competency5" />
    <person:requires rdf:resource="&competencies;Competency6" />
    <person:requires rdf:resource="&competencies;Competency8" />
    <person:requires rdf:resource="&competencies;Competency9" />
    <person:hasCoursed          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course1.rdf" />

</rdf:RDF>
```

```

        <person:hasCoursed
            rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course2.rdf" />
        <person:hasCoursed
            rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course3.rdf" />
        </person:Person>
</rdf:RDF>

```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/people/tereza.rdf>

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
    <!ENTITY
        competencies
            "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:person="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/person.rdfs#"
    xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/tereza.rdf#">

    <person:Person
        rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/tereza.rdf">
        <person:name>Tereza</person:name>
        <person:requires rdf:resource="&competencies;Competency5" />
        <person:requires rdf:resource="&competencies;Competency6" />
        <person:requires rdf:resource="&competencies;Competency8" />
        <person:requires rdf:resource="&competencies;Competency9" />
        <person:requires rdf:resource="&competencies;Competency13" />
        <person:hasCoursed
            rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/coursel.rdf" />
        <person:hasCoursed
            rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course2.rdf" />
        <person:hasCoursed
            rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course3.rdf" />
        </person:Person>
</rdf:RDF>

```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/people/joao.rdf>

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
    <!ENTITY
        competencies
            "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:person="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/person.rdfs#"
    xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/joao.rdf#">

    <person:Person
        rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/joao.rdf">
        <person:name>Joao</person:name>
        <person:requires rdf:resource="&competencies;Competency12" />
        <person:hasCoursed
            rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/coursel.rdf" />
        <person:hasCoursed
            rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course2.rdf" />
        </person:Person>
</rdf:RDF>

```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/people/ana.rdf>

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
    <!ENTITY
        competencies
            "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF

```

```

xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xmlns:person="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/person.rdfs#"
xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/ana.rdf#">

  <person:Person                                rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/ana.rdf">
    <person:name>Ana</person:name>
    <person:requires rdf:resource="&competencies;Competency12"/>
    <person:hasCoursed          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course1.rdf"/>
    <person:hasCoursed          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course2.rdf"/>
    <person:hasCoursed          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course3.rdf"/>
    <person:hasCoursed          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course5.rdf"/>
  </person:Person>
</rdf:RDF>

```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/people/cristiano.rdf>

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:person="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/person.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/cristiano.rdf#">

  <person:Person                                rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/people/cristiano.rdf">
    <person:name>Cristiano</person:name>
    <person:requires rdf:resource="&competencies;Competency1"/>
    <person:requires rdf:resource="&competencies;Competency2"/>
    <person:requires rdf:resource="&competencies;Competency4"/>
    <person:requires rdf:resource="&competencies;Competency5"/>
    <person:requires rdf:resource="&competencies;Competency6"/>
    <person:requires rdf:resource="&competencies;Competency12"/>
  </person:Person>
</rdf:RDF>

```

URI: <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course1.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course1.rdf#">

  <course:Course          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course1.rdf">
    <course:name>Course1</course:name>
    <course:price>100</course:price>
    <course:develops rdf:resource="&competencies;Competency1" />
  </course:Course>

</rdf:RDF>
```

URI: <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course2.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course2.rdf#">

  <course:Course          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course2.rdf">
    <course:name>Course2</course:name>
    <course:price>150</course:price>
    <course:develops rdf:resource="&competencies;Competency2" />
    <course:develops rdf:resource="&competencies;Competency4" />
    <course:preRequisite          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course1.rdf" />
  </course:Course>

</rdf:RDF>
```

URI: <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course3.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course3.rdf#">

  <course:Course          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course3.rdf">
    <course:name>Course3</course:name>
    <course:price>150</course:price>
    <course:develops rdf:resource="&competencies;Competency2" />
    <course:develops rdf:resource="&competencies;Competency3" />
    <course:preRequisite          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course1.rdf" />
  </course:Course>

</rdf:RDF>
```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course4.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course4.rdf#">

  <course:Course          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course4.rdf">
    <course:name>Course4</course:name>
    <course:price>300</course:price>
    <course:develops rdf:resource="&competencies;Competency5" />
    <course:develops rdf:resource="&competencies;Competency6" />
    <course:develops rdf:resource="&competencies;Competency8" />
    <course:develops rdf:resource="&competencies;Competency12" />
    <course:preRequisite          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course2.rdf" />
    <course:preRequisite          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course5.rdf" />
  </course:Course>

</rdf:RDF>
```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course5.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course5.rdf#">

  <course:Course          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course5.rdf">
    <course:name>Course5</course:name>
    <course:price>250</course:price>
    <course:develops rdf:resource="&competencies;Competency5" />
    <course:develops rdf:resource="&competencies;Competency6" />
    <course:develops rdf:resource="&competencies;Competency7" />
    <course:preRequisite          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course3.rdf" />
  </course:Course>

</rdf:RDF>
```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course6.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course6.rdf#">

  <course:Course          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course6.rdf">
    <course:name>Course6</course:name>
    <course:price>150</course:price>
    <course:develops rdf:resource="&competencies;Competency4" />
    <course:develops rdf:resource="&competencies;Competency5" />
    <course:develops rdf:resource="&competencies;Competency6" />

</rdf:RDF>
```

```

        <course:preRequisite          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course3.rdf" />
      </course:Course>
</rdf:RDF>

```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course7.rdf>

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course7.rdf#">
  <course:Course          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course7.rdf">
    <course:name>Course7</course:name>
    <course:price>400</course:price>
    <course:develops rdf:resource="&competencies;Competency9" />
    <course:develops rdf:resource="&competencies;Competency10" />
    <course:develops rdf:resource="&competencies;Competency13" />
    <course:preRequisite          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course4.rdf" />
  </course:Course>
</rdf:RDF>

```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course8.rdf>

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course8.rdf#">
  <course:Course          rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course8.rdf">
    <course:name>Course8</course:name>
    <course:price>300</course:price>
    <course:develops rdf:resource="&competencies;Competency8" />
    <course:develops rdf:resource="&competencies;Competency9" />
    <course:develops rdf:resource="&competencies;Competency11" />
    <course:preRequisite          rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course5.rdf" />
  </course:Course>
</rdf:RDF>

```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course9.rdf>

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY          competencies          "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course9.rdf#">

```

```

    <course:Course                                rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course9.rdf">
      <course:name>Course9</course:name>
      <course:price>300</course:price>
      <course:develops rdf:resource="&competencies;Competency9"/>
      <course:develops rdf:resource="&competencies;Competency11"/>
      <course:preRequisite                        rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course6.rdf"/>
    </course:Course>
  </rdf:RDF>

```

**URI:** <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/courses/course10.rdf>

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<!DOCTYPE rdf:RDF [
  <!ENTITY                                competencies                        "http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">
]>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:course="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/course.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course10.rdf#">
  <course:Course                                rdf:about="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course10.rdf">
    <course:name>Course10</course:name>
    <course:price>300</course:price>
    <course:develops rdf:resource="&competencies;Competency9"/>
    <course:develops rdf:resource="&competencies;Competency10"/>
    <course:develops rdf:resource="&competencies;Competency11"/>
    <course:develops rdf:resource="&competencies;Competency12"/>
    <course:preRequisite                        rdf:resource="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/courses/course6.rdf"/>
  </course:Course>
</rdf:RDF>

```

URI: <http://www.lac.inf.puc-rio.br/~ferrao/ontologies/rdf/competencies.rdf>

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:aulanet="http://www.lac.inf.puc-rio.br/~ferrao/ontologies/onts-
rdfs/aulanet.rdfs#"
  xml:base="http://www.lac.inf.puc-
rio.br/~ferrao/ontologies/rdf/competencies.rdf#">

  <aulanet:Competency rdf:ID="Competency1">
    <aulanet:name>Competency1</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency2">
    <aulanet:name>Competency2</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency3">
    <aulanet:name>Competency3</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency4">
    <aulanet:name>Competency4</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency5">
    <aulanet:name>Competency5</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency6">
    <aulanet:name>Competency6</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency7">
    <aulanet:name>Competency7</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency8">
    <aulanet:name>Competency8</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency9">
    <aulanet:name>Competency9</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency10">
    <aulanet:name>Competency10</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency11">
    <aulanet:name>Competency11</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency12">
    <aulanet:name>Competency12</aulanet:name>
  </aulanet:Competency>

  <aulanet:Competency rdf:ID="Competency13">
    <aulanet:name>Competency13</aulanet:name>
  </aulanet:Competency>

</rdf:RDF>
```

## Anexo B

### Implementação das funções de similaridade para o domínio de gerência de competências para os casos de matching Nto1 e NtoN

```
public class PersonCourseEvaluator extends IndividualEvaluator
{
    public double[] evalNto1(IndividualsCollection persons, Individual course)
    {
        double result = 0.0f;
        double firstValue = -1.0f;
        boolean firstTime = true;
        try
        {
            persons = (IndividualsCollection) persons.clone();
            Iterator iter = persons.iterator();
            while( iter.hasNext() )
            {
                Individual currPerson = (Individual) iter.next();
                double[] currEval = eval1to1( currPerson, course );
                if( currEval[0] >= 0 )
                {
                    stateChanger.changeState( currPerson, course );
                }
                if( currEval[0] == 0 )
                {
                    currEval[0] = -0.1f;
                }
                result += currEval[0];
                if( firstTime )
                {
                    firstValue = currEval[0];
                    firstTime = false;
                }
            }
            return new double []{ result, firstValue };
        }
        catch( PropertyNotFoundException e )
        {
        }
        return new double [] { result };
    }

    public double[] evalNtoN(IndividualsCollection persons,
                             IndividualsCollection courses)
    {
        double result = 0.0f;
        double firstValue = -1.0f;
        boolean firstTime = true;
        double totalPrice = 0.0f;
        try
```

```
{
    IndividualsCollection ps =
        (IndividualsCollection) persons.getClone();
    Iterator iter = courses.iterator();
    while( iter.hasNext() )
    {
        Individual currCourse = (Individual) iter.next();
        double[] currEval = evalNto1( ps, currCourse );
        if( currEval[0] >= 0 )
        {
            stateChanger.changeState( ps, currCourse );
        }
        if( currEval[0] == 0 )
        {
            currEval[0] = -0.1f;
        }
        result += currEval[0];
        totalPrice += currCourse.getPropertyAsDouble( "price" );
        if( firstTime )
        {
            firstValue = currEval[0];
            firstTime = false;
        }
    }
    return new double [] { result, -totalPrice, firstValue };
}
catch( Exception e )
{
}
return new double[] { result };
}
```

## Anexo C

### Implementação de matching entre perfis de pessoas

```
public class PersonPersonDomainKnowledge extends DomainKnowledge
{
    public PersonPersonDomainKnowledge()
    {
        super( new PersonPersonEvaluator(), (StateChanger) null );
    }
}

public class PersonPersonEvaluator extends IndividualEvaluator
{
    public double[] evalItto1( Individual person, Individual partner )
    {
        double count = 0.0f;

        if( person.equals( partner ) )
        {
            return new double[] { -100.0f };
        }

        try
        {
            Iterator personReqs = person.getRelation( "requires" ).iterator();
            while( personReqs.hasNext() )
            {
                Individual personReq = (Individual) personReqs.next();

                Iterator partnerReqs = partner.getRelation( "requires" ).iterator();
                while( partnerReqs.hasNext() )
                {
                    Individual partnerReq = (Individual) partnerReqs.next();

                    StringComparator cmp = new StringComparator();
                    if( cmp.compare( personReq.getId(), partnerReq.getId() ) == 0 )
                    {
                        count++;
                    }
                }
            }
        }
        catch( Exception e )
        {
        }
        return new double[] { count };
    }

    public double[] evalIttoN( Individual person, IndividualsCollection partners )
    {
        double result = 0.0f;
    }
}
```

```
try
{
    Iterator partnersIt = partners.iterator();
    while( partnersIt.hasNext() )
    {
        Individual partner = (Individual) partnersIt.next();

        double[] currEval = evalltol( person, partner );
        if( currEval[0] == 0 )
        {
            currEval[0] = -0.1f;
        }

        result += currEval[0];
    }
}
catch( Exception e )
{
}
return new double[] { result };
}
```

## Anexo D

### Evaluator que implementa o conceito de prioridade nos resultados de matching

```
public abstract class PriorityEvaluator extends Evaluator
{
    protected Evaluator evaluator;

    public PriorityEvaluator( Evaluator evaluator )
    {
        this.evaluator = evaluator;
    }

    public abstract double getPriority( MatchingObject o1, MatchingObject o2 );

    public double[] eval( MatchingObject o1, MatchingObject o2 )
    {
        if( evaluator == null )
        {
            return new double[] { 0.0f };
        }

        // Valores de similaridades obtidos pelo evaluator adaptado
        double[] tmpResults = evaluator.eval( o1, o2 );

        // Valor de prioridade entre a demanda e a oferta
        double priorityValue = getPriority( o1, o2 );

        // Valor de similaridade contemplando o conceito de prioridade
        double[] results = new double[tmpResults.length + 1];

        results[0] = priorityValue;
        for( int i = 0; i < tmpResults.length; i++ )
        {
            results[i + 1] = tmpResults[i];
        }
        return results;
    }

    /* Funções de avaliação adaptadas */

    public double[] eval1to1( MatchingObject o1, MatchingObject o2 )
    {
        return evaluator.eval1to1( o1, o2 );
    }

    public double[] eval1toN( MatchingObject c, MatchingObjectCollection list )
    {
        return evaluator.eval1toN( c, list );
    }
}
```

```

public double[] evalNto1( MatchingObjectCollection list, MatchingObject c )
{
    return evaluator.evalNto1( list, c );
}

public double[] evalNtoN( MatchingObjectCollection l1,
                          MatchingObjectCollection l2 )
{
    return evaluator.evalNtoN( l1, l2 );
}
}

```

### Implementação de PriorityEvaluator para o domínio de gerência de competências

```

public class PersonCourseDomainKnowledgeWithPriority extends DomainKnowledge
{
    public PersonCourseDomainKnowledgeWithPriority()
    {
        super( new PersonCoursePriorityEvaluator( new PersonCourseEvaluator() ),
              new PersonCourseStateChanger() );
        addRestriction( new PersonCourseRestriction() );
    }
}

public class PersonCoursePriorityEvaluator extends PriorityEvaluator
{
    public PersonCoursePriorityEvaluator( Evaluator evaluator )
    {
        super( evaluator );
    }

    public double getPriority( MatchingObject o1, MatchingObject o2 )
    {
        if( o2.isList() )
        {
            return getPriority( (Individual) o1, (IndividualsCollection) o2 );
        }
        else
        {
            return getPriority( (Individual) o1, (Individual) o2 );
        }
    }

    public double getPriority( Individual person, IndividualsCollection courses )
    {
        double[] result = { 0.0f };
        double epsilon = 1.0f;
        try
        {
            result = evaluator.evalltoN( person, courses );

            Iterator coursesIt = courses.iterator();
            while( coursesIt.hasNext() )
            {

```

```
        Individual course = (Individual) coursesIt.next();

        if( course.getPropertyAsString( "name").equals( "Course5" ) )
        {
            epsilon = 1.5f;
            break;
        }
    }
}
catch( Exception e )
{
}
return epsilon * result[0];
}

public double getPriority( Individual person, Individual course )
{
    double[] result = { 0.0f };
    double epsilon = 1.0f;
    try
    {
        result = evaluator.evalItol( person, course );

        if( course.getPropertyAsString( "name").equals( "Course5" ) )
        {
            epsilon = 1.5f;
        }
    }
    catch( Exception e )
    {
    }
    return epsilon * result[0];
}
}
```