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Overview

My main research interests lie in the Computational Linguistics and Artificial Intelligence areas, especially its practical application in the fields of Translation Technologies, Specialised Translation, Natural Language Processing, Information Extraction, Information Retrieval. Apart from that I am also interested in (or have worked on) a number of other topics such as Recommender Systems, Multiagent Systems, Affective Computing, amongst others.

Education

- **PhD student** LEXYTRAD, University of Malaga, Spain
Translation Technologies 2013-Present
– Student of the Doctoral Program in Arts.
- **MSc** CISUC, University of Coimbra, Portugal
Informatics Engineering 2007-2010
– MSc in Computer Science, University of Coimbra.
– Thesis: “Automatic Extraction and Validation of Lexical Ontologies from text” (18/20).
- **BSc** University of Coimbra, Portugal
Informatics Engineering 2004-2010
– BSc in Computer Science, University of Coimbra.

Work Experience

- **Early Stage Researcher** Malaga, Spain
EXPERT project, Marie Curie Sep. 2013 - Present
– Collection and preparation of multilingual data for multiple corpus-based approaches to translation.
- **Researcher** Malaga, Spain
INTELITERM project, LEXYTRAD Mar. 2014 - Present
– Desarrollo de un sistema inteligente de gestión terminológica para traductores.
- **Researcher** Coimbra, Portugal
FASSIT project, CISUC Dec. 2010 - Aug. 2013
– Prototype of an Advanced Travel Information System.
- **Industry** Coimbra, Portugal
Spotter Jun. 2013 - Jul. 2013
– Harvesting & Sourcing.

- Teaching** Coimbra, Portugal
 • *Coimbra Institute of Engineering (ISEC)* *Sep. 2012 - Jan. 2013*
 – Programming and Algorithms.
- Co-orientation** Coimbra, Portugal
 • *Luís Reis, MSc student* *Sep. 2011 - Sep. 2012*
 – MSc in Computer Science, University of Coimbra.
 – Thesis: “Recommender System based on Knowledge”. Final mark: 17/20.
- Teaching** Coimbra, Portugal
 • *Escola Profissional da Lousã* *Sep. 2010 - July 2012*
 – Operating Systems, Communication Networks and Computers Architecture.
- Researcher** Coimbra, Portugal
 • *Linguateca, FCCN* *Sep. 2011 - Dec. 2011*
 – R&D an online service for browsing Portuguese semantic relations.
- Researcher** Coimbra, Portugal
 • *BII (research integration scholarship), CISUC* *Oct. 2009 - Oct. 2010*
 – Semi-automatic construction of a Portuguese ontology.
- Researcher** Coimbra, Portugal
 • *ONTO.PT project, CISUC* *Sep. 2009 - Sep. 2010*
 – Created NLP algorithms to extract and validate semantic knowledge.
 – Tested and integrated *Google* and *Yahoo API* for the semantic knowledge validation task.
- Researcher** Coimbra, Portugal
 • *KDigg project, CISUC* *Sep. 2009 - Jan. 2010*
 – Implemented automatic algorithms to extract semantic information from ideas & documents.

Publications

• Published Books

- COSTA, H. *Automatic Extraction and Validation of Lexical Ontologies from text: Creating Lexical Ontologies from text*. LAP LAMBERT Academic Publishing, October 2011 [Amazon .com, .co.uk, .de, .fr]

• Published Articles

- COSTA, H., CORPAS PASTOR, G., SEGHIRI, M., AND MITKOV, R. (*Accepted*) iCorpora: Compiling, Managing and Exploring Multilingual Data. In *7th Int. Conf. of the Iberian Association of Translation and Interpreting Studies* (Malaga, Spain, January 2014), AIETI
- COSTA, H., CORPAS PASTOR, G., AND SEGHIRI, M. iCompileCorpora: A Web-based Application to Semi-automatically Compile Multilingual Comparable Corpora. In *36th Translating and the Computer Conference* (London, UK, November 2014), AsLing [pdf, Poster]
- COSTA, H., CORPAS PASTOR, G., AND DURÁN MUÑOZ, I. A comparative User Evaluation of Terminology Management Tools for Interpreters. In *25th Int. Conf. on Computational Linguistics (COLING'14), 4th Int. Workshop on Computational Terminology (CompuTerm'14)* (Dublin, Ireland, August 2014), Association for Computational Linguistics and Dublin City University, pp. 68–76 [pdf, Poster]

- COSTA, H., CORPAS PASTOR, G., AND DURÁN MUÑOZ, I. Technology-assisted Interpreting. *MultiLingual #143 25*, 3 (April/May 2014), 27–32 [http]
- MACEDO, L., COSTA, H., AND CARDOSO, A. Overcoming Information Overload with Artificial Selective Agents. In *13th Int. Conf. on Autonomous Agents and Multiagent Systems* (Paris, France, May 2014), AAMAS’14, IFAAMAS, pp. 1597–1598 [pdf]
- MACEDO, L., COSTA, H., AND CARDOSO, A. Overcoming Information Overload with Artificial Selective Agents: an Application to Travel Information Domain. In *13th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS’14)*, *8th Int. Workshop on Agents in Traffic and Transportation* (Paris, France, May 2014), ATT’14, IFAAMAS, p. 8 [pdf]
- MACEDO, L., COSTA, H., AND CARDOSO, A. A Selective Attention-based, Multi-Agent, Travel Information System. In *16th Portuguese Conference on Artificial Intelligence* (Azores, Portugal, September 2013), EPIA’13, Local Proceedings - Advances in Artificial Intelligence, pp. 394–405 [pdf]
- COSTA, H., FURTADO, B., PIRES, D., MACEDO, L., AND CARDOSO, A. Recommending POIs based on the User’s Context and Intentions. In *Highlights on Practical Applications of Agents and Multi-Agent Systems*, vol. 365 of *Communications in Computer and Information Science*. Springer, Salamanca, Spain, May 2013, pp. 166–177 [pdf] [Award of Scientific Excellence]
- COSTA, H., AND MACEDO, L. Emotion-Based Recommender System for Overcoming the Problem of Information Overload. In *Highlights on Practical Applications of Agents and Multi-Agent Systems*, vol. 365 of *Communications in Computer and Information Science*. Springer, Salamanca, Spain, May 2013, pp. 178–189 [pdf]
- COSTA, H., FURTADO, B., PIRES, D., MACEDO, L., AND CARDOSO, A. Context and Intention-Awareness in POIs Recommender Systems. In *6th ACM Conf. on Recommender Systems (RecSys’12)*, *4th Workshop on Context-Aware Recommender Systems* (Dublin, Ireland, September 2012), CARS’12, ACM, p. 5 [pdf]
- GONÇALO OLIVEIRA, H., COSTA, H., AND SANTOS, D. Folheador: browsing through Portuguese semantic relations. In *13th Conf. of the European Chapter of the Association for Computational Linguistics* (Avignon, France, April 2012), EACL’12, ACL Press, pp. 35–40 [pdf, Poster]
- GONÇALO OLIVEIRA, H., COSTA, H., AND SANTOS, D. Browsing Portuguese with Folheador. In *10th Int. Conf. on the Computational Processing of the Portuguese Language, Demo Session* (Coimbra, Portugal, April 2012), PROPOR’12, p. 3 [pdf, Poster]
- COSTA, H. O desenho do novo Folheador. Tech Report, Linguateca, FCCN, December 2011 [pdf]
- GONÇALO OLIVEIRA, H., ANTÓN PÉREZ, L., COSTA, H., AND GOMES, P. Uma grande rede léxico-semântica para o português extraída a partir de dicionários electrónicos. *Linguamática* 3, 2 (December 2011), 23–38 [pdf]
- COSTA, H., GONÇALO OLIVEIRA, H., AND GOMES, P. Using the Web to Validate Lexico-Semantic Relations. In *15th Portuguese Conf. on Artificial Intelligence* (Lisbon, Portugal, October 2011), vol. 7026 of *EPIA ’11*, Springer, pp. 597–609 [pdf] [Nominated for Best Paper Award]
- GONÇALO OLIVEIRA, H., COSTA, H., AND GOMES, P. Extração de conhecimento léxico-semântico a partir de resumos da Wikipédia. In *INForum 2010 - II Simpósio de Informática, Track on Gestão e Tratamento de Informação* (Braga, Portugal, September 2010), INForum’10, pp. 537–548 [pdf]
- COSTA, H., GONÇALO OLIVEIRA, H., AND GOMES, P. The Impact of Distributional Metrics in the Quality of Relational Triples. In *19th European Conf. on Artificial Intelligence, Workshop on Language Technology for Cultural Heritage, Social Sciences, and Humanities* (Lisbon, Portugal, August 2010), ECAI’10, pp. 23–29 [pdf]

- **MSc Thesis**

- COSTA, H. Automatic Extraction and Validation of Lexical Ontologies from text. Master's thesis, University of Coimbra, Faculty of Sciences and Technology, Department of Informatics Engineering, Coimbra, Portugal, September 2010

Software

Folheador: An online service for browsing through Portuguese semantic relations.

iPois: An Intelligent Traveler Information System based on a generic selective attention-based, multi-agent information system.

Scholarships

- COSTA, H. “Campus de Excelencia Internacional en Patrimonio, PatrimoniUN10”, beca de ayuda a la movilidad para la realización de estancias en 2014 para la obtención de la mención internacional en el título de Doctor. Funding entity: CEI (Campus of International Excellence in Heritage, PatrimoniUN10, integrated by the ten Andalusian public universities and coordinated by the University of Jaén, Spain), May 2014. Scholarship of 2,500€ for the time period between September 8th, 2014 and December 8th, 2014 for research activities at the Research Institute in Information and Language Processing (RIILP), University of Wolverhampton, UK