

Abdelhadi Soudi, Full Professor

-Head of the multidisciplinary research team «Language Engineering, Technologies and Handicap»

-Head of the Center for Languages and Communication

-Advisory Board Member of the Arab-German Young Academy of Sciences and Humanities <http://www.bbaw.de/en/agya/concept>

-Ambassador Scientist of Alexander von Humboldt Foundation

<http://www.humboldt-foundation.de/web/home.html>

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- **AWARDS OF EXCELLENCE, POSTDOCTORAL RESEARCH FELLOWSHIPS / CONFERENCE CHAIR**

2013: **First Prize Winner** in the Computing and IT Poster session at **Qatar Foundation Annual Research Conference** (Doha, November 24-25, 2013).

2012 : **PEER Science research award** granted by the USA National Academies of Sciences in collaboration with the National Science Foundation.

http://www.nsf.gov/news/news_summ.jsp?cntn_id=124068

http://sites.nationalacademies.org/PGA/dsc/peerscience/PGA_069374

November 2014: **Invited Speaker for the 8th forum on the internationalization of sciences and humanities, Germany. The forum is organized by Alexander von Humboldt Foundation.**

October 2014: **Keynote Speaker of the Invited Session on "Arabic NLP: Models, Systems and Applications", IEEE Colloquium on Information Science and Technology**

June 2014: **Invited speaker (Panelist) on Arab-German Scientific Cooperation, Berlin June 21, 2014, Opening conference of Arab-German Young Academy of Sciences and Humanities.**

2004: I was appointed **expert** to evaluate research projects proposed within the framework of **European Commission 6th Framework Programme for Research, Technological Development and Demonstration (Future and Emerging Technologies (FET programme))**.

2013: Alexander von Humboldt Reinvitation Research fellowship for experienced researchers to undertake research and give seminars at several German universities: Humboldt University in Berlin, the German Research Center for Artificial Intelligence, Saarbruecken, Georg August University Goettingen, Goettingen, frei University in Berlin

2012: Chair of the Alexander von Humboldt Foundation sponsored conference "New Prospects for Science and Education in the MENA region", Marrakech, March 2012.

2011: Co-chair of the Alexander von Humboldt Foundation sponsored conference «Internationalization of Research: Opportunities and Challenges», Rabat, April 2011.

1998: Fulbright Research grant to undertake research at Carnegie Mellon's Language Technologies Institute (Pittsburgh, USA)

2003: Alexander von Humboldt Postdoctoral Research Fellowship to undertake research at the German Research Center for Artificial Intelligence (Saarbrücken, Germany)

2006: Co-chair of the NSF funded workshop "United States-Morocco *Human Language Technology: team building and project startup*". NSF AWARD NUMBER 0538906
<http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0538906>

2005: I was invited by the Research Director of the USA's Great Plains Network (through an NSF grant) to initiate research cooperation in the area of Human Language Technologies between the United States and Morocco. AWARD NUMBER 0353201
<http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0353201>

2008: Award of Excellence for having contributed (by a seminar on Human Language Technologies) to Franklin College / University's (Switzerland) travel program.

2008: Chair of the Alexander von Humboldt-sponsored conference «Human Language Technology in Africa: Status and perspectives», Rabat, Morocco.

2009: Conference Chair of the Alexander von Humboldt Foundation/German Embassy Conference "Beyond Discipline Boundaries: Building a culture of research and education interdisciplinarity"

2008: Co-chair of the LREC's workshop "Human Language Technologies and NLP within the Arab World.

2004: I was appointed **expert** to evaluate research projects proposed within the framework of **European Commission 6th Framework Programme for Research, Technological Development and Demonstration (Future and Emerging Technologies (FET programme))**.

2006: Alexander von Humboldt Return Fellowship

- **SELECTED (international) RESEARCH PROJECTS/ACTIVITIES in the area of ICT/Human Language Technology**

- **Project Leader of "Assistive Technologies for Improving Literacy among the Deaf and Hard of Hearing" (2012-2014)**. Project funded by United States Agency for International Development through the USA National Academies of Sciences and the National Science Foundation (USA). The project aims at developing software that translates between Moroccan Sign Language and Standard Arabic.
http://sites.nationalacademies.org/PGA/dsc/peerscience/PGA_069374
- **Project Leader of "Affordable Design and Entrepreneurship – Morocco" (2011-2012) in collaboration with Franklin W. Olin College of Engineering and Babson college (United States)**. The project aims at educating students to create innovative solutions to social challenges through design and entrepreneurship that are more just and sustainable and (ii) facilitating greater variety in student participation and preparation, and to contribute to the development of a diverse, globally-engaged,

science and engineering workforce. This project is funded by the US embassy (Morocco) through the Moroccan Fulbright Alumni Association.

- Initiator of research and Education cooperation between the United States and Morocco in the area of Human Language Technologies through the **USA National Science Foundation funded workshop “United States-Morocco Human Language Technology: team building and project startup”**. NSF AWARD NUMBER 0538906. I was co-chair of the workshop.

<http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0538906>

- **Research Project Principal Investigator of English-to-Arabic Knowledge-Based Machine Translation**, Research Project funded by the Moroccan National Center for Scientific and Technical Research
- **Project Co-Principal Investigator:** The development of linguistic tools that support Human and Machine Translation between Arabic and Italian. This project is in collaboration with «Istituto di Linguistica Computazionale», PISA, Italy and is jointly funded by CNRST (Morocco) and the National Center for Research (Italy) / (2004-2005)
- Collaborator: a European Union-funded project on the development of Mediterranean language resources and tools (NEMLAR project) (2004-2006)
- Host scientist and advisor of a National Science Foundation Research Fellowship grantee from Carnegie Mellon University's Language Technologies Institute (Pittsburgh, USA). (2001-2007)
- Partnership agreement between the center I direct and the UFR ACSYS: Architecture et Conception de Systèmes (faculty of sciences, Rabat) to co-supervise PhD students as well as to jointly work on HLT research projects.

Education

2002 PhD / Doctorat d'Etat in Computational Linguistics: *A Computational Lexeme-Based Treatment of Arabic Morphology*. Mohamed V University (Morocco). Part of my PhD research was undertaken at Carnegie Mellon University's Language Technologies Institute, Pittsburgh, USA

1993-1996 Diplôme des Etudes Supérieures (MASTER) in Linguistics: *Argument Extraction in Standard Arabic*. Mohammed V University, Rabat

1993-1995 **Analyst Programmer Degree**, Institute of Computer Science and Management (IFIAG), Rabat, Morocco

1992-1993 Diplôme des Etudes Approfondies (DEA), Degree of Advanced Studies in Linguistics. Mohammed V University, Rabat

1991 Licence Linguistics: *A Government and Binding Approach to wh-movement in Arabic*. Ibn Zohr University, Agadir, Morocco.

• PUBLICATIONS

Books:

1. Soudi A., Farghaly A., Neumann, G. and Zbib, R. (Editors) (2012). *Challenges for Arabic Empirical Machine Translation*. In *John Benjamins' Natural Natural Language Processing Series*. <http://benjamins.com/#catalog/books/nlp.9>
2. Soudi A., Van den Bosch A. and Neumann G (2007): *Arabic Computational Morphology: knowledge-based and Empirical Methods*. Editors: Soudi A., Van den Bosch A. and Neumann G. In *Kluwer/Springer's series on Text, Speech, and Language Technology (series editors Nancy Ide and Jean Veronis)*.

3. Soudi, A., Gibbon, D., Neumann, G. and Roux, J. C. (Editors) (2008). *Proceedings of the Alexander von Humboldt Kolleg Human Language Technologies in Africa: Status and Prospects*. Morocco, 2008.

CHAPTERS:

4. Zbib, R. and Soudi A. (2012). Introductory chapter to the book *Challenges for Arabic Empirical Machine Translation*. Edirors: Soudi A., Farghaly A., Neumann, G. and Zbib, R. In *John Benjamins' Natural Natural Language Processing Series*.
5. Soudi A., Van den Bosch A. and Neumann G (2007). Introductory chapter to the book *Arabic Computational Morphology: knowledge-based and Empirical Methods*, Editors: Soudi A., Van den Bosch A. and Neumann G. In *Kluwer/Springer's series on Text, Speech, and Language Technology (series editors Nancy Ide and Jean Veronis)*.
6. Habash, N. Soudi, A. and Buckwalter, T. G (2007). Notes on Arabic Transliteration, In *Arabic Computational Morphology: knowledge-based and Empirical Methods. Kluwer/Springer's series on Text, Speech, and Language Technology (series editors Nancy Ide and Jean Veronis)*, Editors: Soudi A., Van den Bosch A. and Neumann G.
7. Cavalli-Sforza, V. and Soudi A. (2007). Arabic Computational Morphology : A tradeoff between multiple operations and multiple stems. In *Arabic Computational Morphology: knowledge-based and Empirical Methods. Kluwer/Springer's series on Text, Speech, and Language Technology (series editors Nancy Ide and Jean Veronis)*, Editors: Soudi A., Van den Bosch A. and Neumann G.
8. Van den Bosch, A., Marsi, E. and Soudi A. (2007). An integrated memory-based system for morphological analysis, part-of-speech tagging, and stem identification of Arabic. In *Arabic Computational Morphology: knowledge-based and Empirical Methods. Kluwer/Springer's series on Text, Speech, and Language Technology (series editors Nancy Ide and Jean Veronis)*, Editors: Soudi A., Van den Bosch A. and Neumann G.

Conference Proceedings:

9. Soudi, A., Vinopol, C. and Er-rady A. (2014). Virtual Reality Technologies for Deaf Education. In *Proceedings of the international conference Building International Networks for Enhancement of Research in Jordan, Amman, April 3-5, 2014*.
10. Soudi, A. Vinopol, C. and Er-rady, A. (2013c). Assistive Technologies for Improved Literacy among the Deaf and Hard of Hearing. In *Proceedings of Qatar Foundation Annual Research Conference, November 24-25, 2013, Doha, Qatar*.
11. Soudi, A. Vinopol, C. and Er-rady, A. (2013b). Standard Arabic-to-Moroccan Sign Language Machine Translation: Does translation from a morphologically rich language reflect the interpreters' allocation of high cognitive resources? In *Proceedings of The Fourth Conference of the Scandinavian Association for Language and Cognition (SALC IV), University of Eastern Finland, Finland, 12-14 June 2013*.
12. Soudi (2013a). A Robust Technology facilitating interaction between the Hearing Culture and the Deaf Culture. In *Proceedings of the session, Interculturalism, Migration and Multiculturalism of the conference "At the Crossroad between Africa, Asia and Europe: Challenges and Perspectives", Venice, Italy, 29 May-01 june*

13. A. Soudi (2011). Larger Natural Language Processing Applications, In *Proceedings of the International Humboldt Kolleg research to Applications Conference, Monastir, Tunisia*.
14. A. Soudi (2010). Information Technology Industry: case of natural language processing systems, Abdelhadi Soudi. In *Proceedings of the International Humboldt Kolleg University-Research Industry: partnering opportunities, Rabat, Morocco*.
15. Abdelhadi Soudi (2008). Issues in the analysis and generation of Arabic. In *Proceedings of the International Humboldt Kolleg Human Language Technologies in Africa: Status and Prospects*. Morocco, 2008.
16. Soudi, A. and Cavalli-Sforza, V. (2006). IMORPHE: An Inheritance and equivalence based morphology description compiler. In *Proceedings of Language Resource Evaluation Conference, Genova, Italy, May 2006*.
17. Marsi, E., van den Bosch, A., Soudi, A. (2005). Memory-based morphological analysis generation and part-of-speech tagging. In *Proceedings of the ACL workshop on computational approaches to semitic languages*, University of Michigan, Ann Arbor, USA. <http://ilk.uvt.nl/~mars/download/pubs/arabic-mbma.pdf>
18. Kabbaj, A., Bouzouba, K. and Soudi, A. (2005). Amine Platform: an Artificial Intelligence Environment for the Development of Intelligent Systems. Paper accepted for presentation at the *Information and Communication Technologies International Symposium*, Tetouan, Morocco, June 2005.
19. Soudi, A. and Eisele, A. (2004). Generating an Arabic Full-form lexicon for Bidirectional Morphological Lookup. In *Proceedings of Language Resource Evaluation Conference, Lisbon, Portugal, May 2004*.
<http://www.coli.unisaarland.de/publications.php?action=6&last=1&pid=1510>
20. Monaco, G. and Soudi, A. (2004). An Emerging Transcontinental Collaborative Research and Educational Agenda in Human Language Technologies. In *Proceedings of Language Resource Evaluation Conference, Lisbon, Portugal, May 2004*. http://www.lrec-conf.org/lrec2004/article.php?id_article=20
21. Soudi, A. (2004). Challenges in the Generation of Arabic sentences from Interlingua representations. In *Proceedings of the conference "Traitement Automatique des Langues Naturelles" TALN'2004*, Fez, Maroc, Avril 2004.
<http://www.lpl.univaix.fr/jep-taln04/proceed/actes/arabe2004/TAAS26.pdf>
22. Marsi E., Soudi, A., and Van den Bosch, A (2003). Memory-based Arabic Morphological Analysis. In *Proceedings of the 14th Conference of Computational Linguistics in the Netherlands*, Anthwerp, Belgium, December 2003.
<http://www.cnts.ua.ac.be/clin2003/abstracts/marsi.html>
23. Soudi, A. and Cavalli-Sforza, V. (2003). Interfacing an Arabic morphology and sentence generation system with an English-to-Arabic Knowledge-based Machine Translation System. In *Proceedings of the Information Technology Workshop*, jointly organized by the National Science Foundation (USA) and ENSIAS, March, 2003, Morocco.
24. Cavalli-Sforza, V., Soudi, A. (2003): Enhancements to a Morphological Generator Motivated by English-to-Arabic MT. In *Proceedings of the Eight International*

25. Soudi, A., Cavalli-Sforza, V. (2002c): Arabic Morphology Generation: A two-step strategy. In *Proceedings of the Arabic and Information Technology International Conference*, organized by "le Haut Conseil de la Langue Arabe/[The High Council of Arabic]", Algiers, Algeria, 28-29 December 2002.
26. Soudi A., Cavalli-Sforza, V. and Jamari, A. (2002b). A Prototype English-to-Arabic Interlingua-based Machine Translation System. In *Proceedings of The Arabic Processing Workshop, Language Resources Evaluation Conference, 2002*, Las Palmas, Spain. http://libra.sfsu.edu/~vcs/LREC_Arabic_Workshop_2002.pdf
27. Soudi, A. Cavalli-Sforza, V. and Jamari, A. (2002a). Arabic Noun System Generation. In *Proceedings of The International Conference on Arabic Processing*, Lamanaba University, April 2002, Tunisia. http://libra.sfsu.edu/~vcs/Manouba_2002.pdf
28. Soudi, A., Violetta Cavalli-Sforza (2001). A Computational Lexeme-Based Treatment of Arabic Morphology. In *Proceedings of the Association for Computational Linguistics, Arabic Processing Workshop*, Toulouse, July 2001, France. <http://www.elsnet.org/arabic2001/soudi.ppt>
29. Cavalli-Sforza, V., Soudi, A. and Teruko M. (2000). Arabic Morphology Generation Using a Concatenative Strategy. In *Proceedings of the 1st Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2000)*, Seattle, USA. <http://acl.ldc.upenn.edu/A/A00/A00-2012.pdf>

Reviewing Scientific Publications + Scientific/program committees

- The 7th International Conference on Informatics and Systems, 28 - 30 March, 2010 Cairo, EGYPT. (*Scientific committee*)
- Association for Computational Linguistics – Area: "Phonology/morphology, tagging and chunking, and word segmentation", Uppsala, Sweden from 11-16 July, 2010 (Program Committee)
- European Chapter of the Association for Computational Linguistics Workshop on Computational Approaches to Semitic Languages, Athens, Greece, 2009. (*Scientific committee*)*
- The Association for Machine Translation in the Americas (AMTA), Machine Translation for Semitic Languages (September, 2003), USA. (*Scientific committee*)
- The 6th International Conference on Informatics and Systems, Natural Language Processing track, Faculty of Computers and Information, Cairo University, Egypt, March 2008 (*Scientific committee*)
- International Colloquium on Arabic Language Processing, June 18th and 19th 2007, IERA, Rabat, Morocco. ((*Scientific committee*))
- The Second International Conference on Arabic Resources & Tools, 22-23 Apr-2009, Cairo, Egypt. (*Scientific committee*)
- Language Resources Evaluation Conference (LREC), European Language Resources Association (ELRA), Arabic Processing workshop (LREC'2002 (*Scientific committee*))
- Colloquium on Arabic Engineering, (June, 2003), Morocco (*co-organizer as well as member of the scientific committee*)
- NEMLAR conference on Language Resources and Tools, (Cairo, 2004) (*Scientific committee*)
- Association of Computational Linguistics' Workshop on Computational Approaches to Semitic Languages, University of Michigan, June 2005. (*program committee*)

-I contributed to the initiative of creating of a Special Interest Group (SIG) on Computational Approaches to Semitic Languages, under the auspices of the Association for Computational Linguistics (ACL).

RESEARCH VISITS TO INTERNATIONAL UNIVERSITIES/LABORATORIES

2013 (june) : Research visits to the German Research Center for Artificial Intelligence, Humboldt University, Frei University, Goettingen University, Germany.

2010 (October): Research visit to Misurata University (Libya) to give a lecture on Natural Language Processing.

2009 (July-December): Alexander von Humboldt resumption research stay at the Computational Linguistics Department of Heidelberg University, Germany.

2008 December: Research visit to the Institute of Computational Linguistics at Zurich University (Zurich, Switzerland).

2005 March: Research stay in the Great Plains Region of the United States, funded by the National Science Foundation (US) – Award: NSF0353201. The purpose of the research visit is to establish a Research and Education agenda in the area of Human Language Technology (HLT) between Morocco and the United States (mainly the Midwest).

2005 December and 2004 December: 4-week research visit to the Institute of Computational Linguistics in Pisa (Italy). The research stay is within the framework of a joint research project on the development of language resources that support machine translation between Italian and Arabic. This research project is jointly funded by CNRST (Morocco) and the National Centre for Research (Italy).

2005 and 2004 (July-September) and 2003 (July–December): Alexander von Humboldt Research Fellow at the German Research Centre for Artificial Intelligence, Language Technology Lab (DFKI, LT lab), Saarbruecken, Germany. My research focus at DFKI's LT lab is Arabic computational morphology and Machine Translation (from and to Arabic).

2003 (From 18 September to 3 October): Research visit to the Computational Linguistics and Artificial Intelligence Section, University of Tilburg, the Netherlands. I built with a team of researchers in this section a Memory-based system for Arabic morphology analysis.

2003 (from 22 december to 27 December: Research visit to the « Centre de Traitement Automatique Des Langues », Université Catholique de Louvain-La-Neuve, Belgium.

2000 July – September, 1999 August – December, 1998 July - December: Fullbright Visiting Researcher at the Language Technologies Institute, School of Computer Science at Carnegie Mellon University, United States.

June 2000: Research visit to the Department of Cognitive and Computing Sciences, Sussex University, Brighton, England.

1998 September (1 week): Research visit to the department of Linguistics at the Massachusetts Institute of Technology (MIT).

1997 July-August: Research visit to the Group of Computational Linguistics at the University of Essex, Colchester, England.

Memberships

- Founding President of the Maghreb-Alexander von Humboldt Alumni Association
- Association for Computational Linguistics (ACL, USA)
- Arab-German Young Academy of Sciences and Humanities
- The Association for Machine Translation in the Americas (AMTA)
- Member of a couple of mailing lists on the computing of Semitic languages
- Founding member of the Moroccan Fulbright Alumni Association