




# Alaa ABI HAIDAR, PhD


Entrepreneur Data Scientist  
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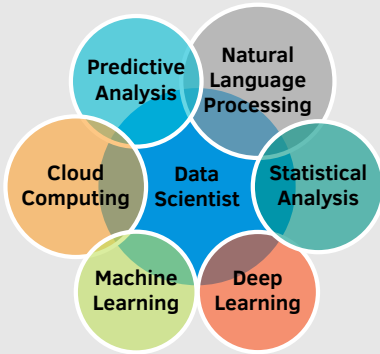
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## Skills

### Overview



### Programming

HTML5 • PHP • Python

R • SQL •  $\LaTeX$  • AWS • GCP

## Projects

**Components** [AI-Generated Art] First AI-Art sold at the Grand Palais

**Collective Brain X** Interactive [Collective brain exhibition and experience] at the Gulbenkian Foundation

**PADeMa** Personal Assistant and Decision Maker [DEMO]

**1001 FACES** A project using science, arts and humanities to illustrate that no man is an island with at most 5 degrees of separation [1001faces.org]

**Missed Connections** - An award winning futurist "documentary" short film [trailer]

**The Art and Science of Traveling** - An award winning documentary about several forms of traveling [more info]

## Education

2006 - 2011 **PhD. Informatics** Indiana University, U.S.A.

2004 - 2005 **MSc. Computer Science** Indiana University, U.S.A

2000 - 2003 **BSc. Computer Science** American University of Beirut, Lebanon

## Experience

2022 **Lead NLP and Sr Data Scientist** **AXSMarine** 16 Pl. de l'Iris, 92400 Paris  
Extraction automatique d'information sur les Charters a partir du Big Data avec une equipe de 4 personnes.

<https://public.axsmarine.com/>

2018 **CEO** **BitOΨ**  
Digital Transformation and AI integration Consultancy to help your company or startup welcome the digital age with Artificial Intelligence, Smart devices, IoT, AIoT, ML and NLP soft solutions.  
[www.bitopsy.com](http://www.bitopsy.com) and [www.alagraphy.com](http://www.alagraphy.com)

2017 **Sr Data Scientist** **Fortia** (Financial Solutions) 17 Ave George V, Paris 75008  
Named Entity Recognition, Natural Language Processing and some computer vision using Machine learning and Deep Learning for Fin-tech and regtech applications mainly on prospectus documents and some AML and KYC computer vision and image processing!

[www.fortia.fr](http://www.fortia.fr)

2016 **Sr Data Scientist** **Snips** 18 rue st Marc, Paris 75002  
Big Data, Named Entity Recognition, Natural Language Processing and Deep Learning for ubiquitous and mobile development from supervised to unsupervised and iterative learning. Used AWS mechanical turk for labeling and other tools for machine learning like lambda, sagemaker. s3, tensorflow, keras, word2vec, glove...

[www.snips.ai](http://www.snips.ai)

2011 - 2015 **Postdoc. LIP6/CNRS/UPMC** University of Pierre Marie Curie  
Proposed several NLP solutions to our partners and sponsors:

- Bioliterature Mining from PubMed, Gene Ontology and the Immune Literature for parametric extraction and systems biology modeling in collaboration between I2D3 at Hopital Pitie-Salpetriere/CNRS and ACASA at LIP6 (Paris 6).
- Named entity recognition (NER) and disambiguation of recently OCR-ised / digitized newspapers from the 19th and 20th century for indexing and reading enhancement in collaboration with the Bibliotheque Nationale de France (BnF) and Europeana Newspaper in collaboration with the LIP6. DEMO
- NER and e-reading enhancement with several Editors and Publishers such as LE ROBERT, NATHAN, JOUVES, TRALLALLAIRES on a project called LOCUPLETO with semantic and stylistic analysis of French Literature on the Labex Obvil project.
- NER and social recommendation of Manga (Japanese Comics) for the iManga project with Actialuna that is in collaboration with the LIP6 in Paris 6. modeling at ACASA au LIP6 and in collaboration with the previous lab.

2008 - 2010 **Invited Researcher** **Instituto Gulbenkian de Ciencia**  
Immune modeling and biomedical text classification and extraction

2004 - 2011 **Research Assistant** Indiana University  
**Thesis:** Immune-Inspired Adaptive Text Classification  
• Order my republished Dissertation

## Languages

## Publications

- A. Abi-Haidar, O. Albertini and J.G. Ganascia. A simple method for named entity recognition for English and French. Wile's DMKD. [in press]
- M. Riguet and A. Abi-Haidar. 2017. Faire figure d'autorité : l'analyse de réseaux appliquée au discours Authority Figures: Social Network Analysis applied to Literature <https://www.openscience.fr/Faire-figure-d-autorite-l-analyse-de-reseaux-appliquee-au-discours>
- Marine Riguet and Alaa Abi Haidar. « Autorités et réseaux d'influence dans la critique littéraire de la seconde moitié du xixe siècle », Estrema : interdisciplinary magazine of humanities, n°8, 2016, p. 195-220. URL : <http://www.estrema-cec.com/wp/?p=562>.
- Alaa Abi-Haidar, Bin Yang, Jean-Gabriel Ganascia [2016]. Mapping the First World War Using Interactive Streamgraphs. *Sociology and Anthropology* Vol. 4(1), pp. 12 - 16 DOI: 10.13189/sa.2016.040103
- Abi Haidar, Alaa; Ganascia, Jean-Gabriel [2016]. Automatic Detection of Characters in Case Insensitive Text in Comics. *Digital Humanities DH/ADHO July 2016 Krakow, Poland*
- Abi Haidar, Alaa; Yang, Bin; Ganascia, Jean-Gabriel [2015]. Extracting and Visualizing Named Entities using Interactive Streamgraphs A Case Study on First World War Data. *Digital Humanites CSDH / SCHN, Canada 2015*.
- C. Brando, F. Frontini, A. Abi Haidar and J.G. Ganascia. [2015] Reconnaissance d'entités nommées : adaptation au domaine de la littérature française du XIXe siècle. *JLC 2015 Orleans, 2-4 Sept 2015*.
- A. Abi-Haidar, M. Tufis, J.G. Ganascia [2014]. *From Inter-Annotation to Intra-Publication Inconsistency*. Proceedings of Inconsistency Robustness 2014. Stanford University, USA.
- Y. Moallem, A. Abi-Haidar and J.G. Ganascia [2014]. *Unsupervised Named Entity Recognition and Disambiguation: An Application to Old French Journals*. Proceedings of ICDM 2014. St. Petersburg, Russia.
- A. Abi-Haidar, A. Six, V. Thomas-Vaslin, J.G. Ganascia. [2013]. *The Artificial Immune Systems Domain Identifying Progress and Main Contributors using Publication and Co-Authorship Analyses*. *Advances in Artificial Life, ECAL*. Vol. 12. 2013.
- A. Abi Haidar. *Adaptive Immune-Inspired Text Classification*. Adaptive Spam Detection and Bio-Medical Article Classification Inspired by T Cell Cross-Regulation in the Immune System. LAP Lambert Academic Publishing ( 2013-03-07 ). ISBN-13: 978-3-659-36068-8
- A. Abi-Haidar [2011]. *An adaptive document classifier inspired by T-Cell cross-regulation in the immune system* (PDF). PhD Dissertation, Indiana University.
- A. Abi-Haidar and Luis. M. Rocha [2011]. *Collective Classification of Textual Documents by Guided Self-Organization in T-Cell Cross-regulation Dynamics*. *Journal of Evolutionary Intelligence*. Evolutionary Intelligence, DOI: 10.1007/s12065-011-0052-5
- A. Lourenço, M. Conover, A. Wong, F. Pan, Alaa Abi-Haidar, A. Nematzadeh, H. Shatkay, and L.M. Rocha [2010]. *Testing Extensive Use of NER tools in Article Classification and a Statistical Approach for Method Interaction Extraction in the Protein-Protein Interaction Literature*. Proceedings of the BioCreative III Workshop 2010, Bethesda, Maryland, September 13-15, 2010.
- A. Abi-Haidar and L.M. Rocha [2010]. *Biomedical Article Classification Using an Agent-Based Model of T-Cell Cross-Regulation*. In: *Artificial Immune Systems: 9th International Conference, (ICARIS 2010)*. Winner of Best Paper Award. E. Hart et al (Eds.) *Lecture Notes in Computer Science*. Springer-Verlag, 6209, 237-249.
- A. Abi-Haidar and L.M. Rocha [2010]. *Collective Classification of Biomedical Articles using T-Cell Cross-regulation*. In: *Artificial Life XII: Twelfth International Conference on the Simulation and Synthesis of Living Systems*. H. Fellersmann et al et al (Eds.). MIT Press, pp. 706-713.
- A. Kolchinsky, A. Abi-Haidar, J. Kaur, A.A. Hamed and L.M. Rocha [2010]. *Classification of protein-protein interaction full-text documents using text and citation network features*. *IEEE/ACM Transactions On Computational Biology And Bioinformatics*, 7(3):400-411.
- A. Kolchinsky, A. Abi-Haidar, J. Kaur, A.A. Hamed and L.M. Rocha [2009]. *Classification of protein-protein interaction documents using text and citation network features*. Proceedings of the BioCreative II.5 Workshop 2009: Special Session on Digital Annotations, Madrid, Spain, October 7-9, 2009. pp 34.
- A. Abi-Haidar and L.M. Rocha [2008]. *Adaptive Spam Detection Inspired by a Cross-Regulation Model of Immune Dynamics: A Study of Concept Drift*. In: Proceedings of 7th International Conference on Artificial Immune Systems (ICARIS 2008). Doheon Lee, Peter Bentley, Sungwon Jung (Eds.) *Lecture Notes in Computer Science*. Springer-Verlag, Volume 5132/2008 36-47 doi:10.1007/978-3-540-85072-4.
- A. Abi-Haidar and L.M. Rocha [2008]. *Adaptive Spam Detection Inspired by the Immune System*. In: *Artificial Life XI: Eleventh International Conference on the Simulation and Synthesis of Living Systems*. S. Bullock, J. Noble, R. A. Watson, and M. A. Bedau (Eds.). MIT Press, pp. 1-8.
- A. Abi-Haidar, J. Kaur, A. Maguitman, P. Radivojac, A. Retchsteiner, K. Verspoor, Z. Wang, and L.M. Rocha [2008]. *Uncovering protein interaction in abstracts and text using a novel linear model and word proximity networks*. *Genome Biology* 2008, 9(Suppl 2):S11 doi:10.1186/gb-2008-9-s2-s11.
- A. Abi-Haidar, J. Kaur, A. Maguitman, P. Radivojac, A. Retchsteiner, K. Verspoor, Z. Wang, and L.M. Rocha [2007]. *Uncovering Protein-Protein Interactions in the Bibliome*. Proceedings of the Second BioCreative Challenge Evaluation Workshop (ISBN 84-933255-6-2).
- Qu, K., A.E. Abi Haidar, J. Fan, D. Basu, G. Lin, L. Ensmann, M. Jolly, P. Ortoleva. [2007]. *Cancer Onset and Progression: A Genome-Wide, Nonlinear Dynamical Systems Perspective on Onconetworks*. *Journal of Theoretical Biology*. Volume 246, Issue 2, 21 Pages 234-244
- Sun, J., K. Tuncay, A. Abi Haidar, F. Stanley, M. Trelinski, and P. Ortoleva. [2007]. *Transcriptional Regulatory Network Discovery via Multiple Method Integration: Application to E.coli K12*. *Algorithms in Molecular Biology*, 2:2 doi:10.1186/1748-7188-2-2
- Kagan Tuncay, Lisa Ensmann, Jingjun Sun, Alaa Abi Haidar, Frank Stanley, Michael Trelinski and Peter Ortoleva [2006]. *Transcriptional regulatory networks via gene ontology and expression data*. *In Silico Biology* 7, 0003
- R.Sultan, Z. Shreif, Lara, A. Abi-Haydar [2004]. *Taming ring morphology in 2D C<sub>60</sub>(OH)<sub>2</sub> Liesegang patterns*. *Phys. Chem. Chem. Phys.*, 6, 3461 - 3466