

Curriculum Vitæ

Bilel Moulahi

Postdoctoral Researcher

University of Montpellier

LIRMM Laboratory, Team ADVANSE



1 EDUCATION

- Oct. 2011 - Dec. 2015* IIRIT Laboratory - Team SIG, University Paul Sabatier (UPS), Toulouse - France
Doctor of Philosophy (Ph.D.), Computer Science.
Research Areas : Multi-criteria aggregation, Temporal Information retrieval, multidimensional relevance estimation.
Dissertation on *Definition and evaluation of aggregation models for multidimensional relevance estimation in Information Retrieval (IR)*.
Advised by Prof. Lynda Tamine and Prof. Sadok Ben Yahia (defended on December 11, 2015).
- 2009 - 2011* Faculty of Science of Tunisia (FST) - University of Tunis EL Manar
M.S. in Computer Science
Research Areas : Social search, tag recommendation Valedictorian : 4/56.
- 2005 - 2009* Faculty of Science of Tunisia (FST) - University of Tunis EL Manar
B.S. in Computer Science
Valedictorian : 4/150.

2 RESEARCH AND WORK EXPERIENCE

- Sept. 2016 - Sept. 2017* Montpellier Laboratory of Informatics, Robotics and Microelectronics (LIRMM), University of Montpellier (UM)
Postdoctoral Researcher
ADVanced Analytics for data SciencE (ADVANSE) team
Directors : Prof. Jérôme Azé, Prof. Sandra Bringay
Topic of research : Suicide detection and prevention within social networks.
- Oct. 2011 - Dec. 2015* IIRIT Laboratory - University of Toulouse Paul Sabatier, France
Research Assistant
Advisor : Prof. Lynda Tamine, Prof. Sadok Ben Yahia
Reviewers : Pr. Patrice Bellot (Université Aix-Marseille), Pr. Chiraz Latiri (Université de la Manouba), Pr. Gabriella Pasi (Università di Milano Bicocca), Pr. Mohand Boughanem (University of Paul Sabatier) *Topics : Information retrieval, multi-criteria aggregation, Temporal Information retrieval*
- Sep. 2010 - Jul. 2011* Faculty of Science of Tunisia - University of Tunis El Manar, Tunisia
Research Intern
Advisor : Prof. Sadok Ben Yahia
Topics : Social web search, tag recommendation, data mining

<i>Feb. 2010 - Jun. 2009</i>	Faculty of Science of Tunisia - University of Tunis El Manar, Tunisia Research Intern <i>Advisor</i> : Prof. Sadok Ben Yahia <i>Topic</i> : data mining
<i>Jul. 2009 - Aug. 2009</i>	National Post Office, Tunis, Tunisia Summer Intern <i>Topic</i> : Customer relationship management

3 INTERNATIONAL MOBILITY

<i>Oct. 1 - Nov. 30, 2014</i>	University of Heidelberg, Germany Research Internship Research interest : Event filtering and timeline generation from news articles. We have implemented an ad-hoc approach for the extraction of relevant events. We have applied existing tools temporal tagging and coreference resolution to extract and normalize temporal as well as co-referring expressions. We evaluated our system in the context of the SemEval 2015 challenge. Supervisors : Prof. Michael Gertz and Dr. Jannik Strötgen
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4 RESEARCH PROJECTS

EXQUI PHC Utique 11G1417 (2011 - 2013) : EXtraction, Quality and Knowledge Engineering in Heterogeneous Environments.

Description : EXQUI is a Franco-Tunisian project funded by the French ministries of Higher Education and Foreign Affairs and the Tunisian Ministry of Higher Education and Scientific Research. This project focuses on the representation, classification and knowledge extraction. I have participated in the scientific exchange with project partners and presented my research activities in the different seminars that were held.

5 HONORS AND AWARDS

- **Best Paper Award** at the IEEE/WIC/ACM Web Intelligence conference (WI'2015).
Title of the Paper : *Leveraging Temporal Query-Term Dependency for Time-Aware Information Access*. 173 submitted papers, 43 accepted long papers. (Singapore, December 6-9, 2015).
- **Travel Grant Award from IEEE TCII** to attend the IEEE/WIC/ACM Web Intelligence (WI'2015) conference (through a competitive selection process).
- **Travel Grant Award from User Modelling Inc.** to attend the 22nd Conference on User modelling, Adaptation and Personalization (UMAP'2014) (Aalborg, Denmark, July 7-11, 2014).

6 PUBLICATIONS

Articles in International Journals

1. **Bilel Moulahi**, Lynda Tamine, Sadok Ben Yahia. When time meets information retrieval : Past proposals, current plans and future trends. In *Journal of Information Science (JIS)*. 2015. Sage (To appear). **Rank**¹ **A - IF5 : 1.158**.
2. **Bilel Moulahi**, Lynda Tamine, Sadok Ben Yahia. iAggregator : Multidimensional relevance aggregation based on a fuzzy operator. In *Journal of the Association for Information Science and Technology (JASIST)*. Vol. 64, N. 10, pages 2062-2083, 2014. Wiley. **Rank A* - IF5 : 2.16**.

1. Conference ranking and 5-year Impact Factors (IF5) are respectively reported from <http://www.core.edu.au/> and Thomsons Reuters(<http://thomsonreuters.com/journal-citation-reports/>)

Book Chapters

1. Chiraz Trabelsi, **Bilel Moulahi**, and Sadok Ben Yahia. Hidden Markov Models for context-aware tag query prediction in Folksonomies. In *Collaboration and the Semantic Web : Social Networks, Knowledge Networks, and Knowledge Resources*, pages 168–190. IGI Global, 2012.

Articles in Peer-Reviewed International Conferences

1. **Bilel Moulahi**, Lynda Tamine and Sadok Ben Yahia. Leveraging Temporal Query-Term Dependency for Time-Aware Information Access (regular paper). In *IEEE/WIC/ACM International Conference on Web Intelligence (WI 2015)*. Vol. I, Pages 149-156, Singapore, December 6-9, 2015. IEEE. **Rank B - Acceptance rate 24,85% (43/173) - Best paper award.**
2. **Bilel Moulahi**, Lynda Tamine and Sadok Ben Yahia. Toward a Personalized Approach for Combining Document Relevance Estimates (regular paper). In *Proceedings of the 22nd Conference on User modelling, Adaptation and Personalization (UMAP 2014)*. Vol. 8538, Pages 158-170, Aalborg, Denmark, July 7-11, 2014. Springer. **Rank B - Acceptance rate 15,75% (23/146).**
3. Chiraz Trabelsi, **Bilel Moulahi**, and Sadok Ben Yahia. HMM-CARE : Hidden Markov Models for context-aware tag recommendation in Folksonomies (regular paper). In *Proceedings of the 27th Annual ACM Symposium on Applied (SAC 2012)*. Pages 957-961, Trento, Italy, March 26-30, 2012. ACM. **Rank B - Acceptance rate 25,6%.**
4. Chiraz Trabelsi, **Bilel Moulahi**, and Sadok Ben Yahia. Folksonomy Query Suggestion via Users' Search Intent Prediction (regular paper). In *Flexible Query Answering Systems - 9th International Conference, (FQAS 2011)*. Pages 388-399, Ghent, Belgium, October 26-28, 2011. Springer. **Rank C - Acceptance rate not communicated.**

Articles in International Evaluation campaigns

1. **Bilel Moulahi**, Lamjed Ben Jabeur, Abdelhamid Chellal, Thomas Palmer, Lynda Tamine, Mohand Boughanem, Karen Pinel-Sauvagnat, Gilles Hubert. IRIT at TREC Real Time Summarization 2016 (regular paper). In *Text REtrieval Conference (TREC 2016)*. Gaithersburg, USA, 2016. NIST.
2. **Bilel Moulahi**, Jannik Strötgen, Michael Gertz and Lynda Tamine. HeidelToul : A Baseline Approach for Cross-document Event Ordering (regular paper). In *T9th International Workshop on Semantic Evaluation (SemEval'15) (together with NAACL-HLT'15)*. Pages 825-829, Denver, Colorado, June 4-5, 2015. ACL.
3. Rafik Abbes, **Bilel Moulahi**, Abdelhamid Chellal, Karen Pinel-Sauvagnat, Nathalie Hernandez, Mohand Boughanem, Lynda Tamine, and Sadok Ben Yahia . IRIT at TREC 2015 Temporal Summarization Track (regular paper). In *Text REtrieval Conference (TREC 2015)*. Gaithersburg, USA, 2015. NIST.
4. Abdelhamid Chellal, Lamjed Ben Jabeur, Laure Soulier, **Bilel Moulahi**, Thomas Palmer, Mohand Boughanem, Karen Pinel-Sauvagnat, Lynda Tamine, and Gilles Hubert. IRIT at TREC 2015 Microblog Track (regular paper). In *Text REtrieval Conference (TREC 2015)*. Gaithersburg, USA, 2015. NIST.
5. **Bilel Moulahi**, Lynda Tamine and Sadok Ben Yahia. IRIT at TREC 2014 Contextual Suggestion Track (regular paper). In *Text REtrieval Conference (TREC 2014)*. Gaithersburg, USA, November 18-21, 2014. NIST.

Articles in French Journals

1. **Bilel Moulahi**, Lynda Tamine, Sadok Ben Yahia. Estimation de la pertinence multidimensionnelle en recherche d'information : évaluation de l'application d'un opérateur flou d'agrégation. In *Document Numérique (DN)*. 2016. Lavoisier (To appear).

Articles in Peer-Reviewed French Conferences

1. **Bilel Moulahi**, Lynda Tamine, Sadok Ben Yahia. Prise en compte des préférences des utilisateurs pour l'estimation de la pertinence multidimensionnelle d'un document (regular paper). In *INformatique des ORganisation et Systèmes d'Information de Décision (INFORSID 2014)*. Pages 295-310, Lyon, France, 20-23 Mai, 2014. **Acceptance rate : 33,33% (23/69).**
2. **Bilel Moulahi**, Lynda Tamine, Sadok Ben Yahia. L'intégrale de Choquet discrète pour l'agrégation de pertinence multidimensionnelle (regular paper). In *Conférence francophone en Recherche d'Information et Applications (CORIA 2013)*. Pages 399-414, Neuchâtel, Suisse, 3-5 Avril, 2013. **Acceptance rate : 17.89% (17/95).**
3. Chiraz Trabelsi, **Bilel Moulahi**, and Sadok Ben Yahia. Les modèles de Markov cachés pour la prédiction des intentions de recherches dans les folksonomies. In *Extraction et Gestion des Connaissances (EGC 2011), Atelier Web Social*, Brest, France, 25 Janvier, 2011. Acceptance rate not communicated.

Theses and Dissertations

1. **Bilel Moulahi**, Definition and evaluation of aggregation models for multidimensional relevance estimation in Information Retrieval. Doctoral Thesis, *University of Toulouse Paul Sabatier, France*, December 2015.
2. **Bilel Moulahi**, Hidden Markov models for search intents prediction in folksonomies. Masters' Report, *University of Tunis El Manar, Tunisia*, July 2011.

7 TEACHING ACTIVITIES

- 2016 - 2017 University of Paul-Valéry Montpellier 3 - France
Teaching Assistant, Department of Computer Science
Content : Database management (Lecture and Lab works)
- 2015 - 2016 University of Toulouse 1 Capitole - France
Teaching Assistant, Department of Computer Science
Content : Database management (Tutorial and Lab works), Excel and VBA programming, Computer and Information Technology certificate (Lab works)
- 2014 - 2015 University of Toulouse III Paul Sabatier - France
Teaching Assistant, Faculty of science and Engineering (FSI)
Content : Information Retrieval Concepts (Tutorial), Search engine implementation (Lab works), Database management (Lab works), Information Systems and Web Development (Lab works)
- 2013 - 2014 University of Toulouse III Paul Sabatier - France
Student tutor, University Institute of Technology of Tarbes
Content : Computer and Information Technology certificate (Lab works)
- 2011 - 2013 University of Tunis El Manar, Faculty of Science of Tunisia
Teaching Assistant, Department of Computer Science
Content : Algorithms and data structure (Lecture), Advanced algorithms (Tutorial)

8 PROFESSIONAL ACTIVITIES

Program Committee member

- **RJCRI'15** : a French Information Retrieval event dedicated to young researchers that is organised as a part of the Conference CORIA 2015.

Organizing Committee member

- **SNDRI'16** (French Conference) : Toulouse, France, Mars 16-18, 2016
- **CLEF'15** (International Conference) : Toulouse, France, September 8-11, 2015
- **DocToMe** (Monthly Doctoral Seminar) : Toulouse, France, *September 2014 to December 2015*. This monthly seminar is dedicated to the popularization of research which it is conducted by PhD students of the doctoral school EDMITT.

Interview

I was commissioned by the laboratory LIRMM to interview Pr. François Pachet, director of Sony Computer Science Laboratory, in the occasion of his participation to the french conference Agora des savoirs² on December, 7, 2016. The interview appeared in the pages of Midi Libre and Directmatin³ journals.

Reviewer - Additional Reviewer

- - IPL : Information Processing Letters Journal, 2017
- - ECIR 2014, 2017 (Short paper), NLDB 2017 (Short), SIGIR 2016, 2015, 2014 (Short), CIKM 2016 (Short), SAC 2015, 2016 (Short)

Hackday 2014, 2016 - CORIA-CIFED

I have participated to the event CORIA-CIFED Hackday organized by the communities of the French conferences CORIA and CIFED on 2014 and 2016 :

- **2016** : We have proposed a model for script generation in TV series. We have developed a prototype that allow the user to personalize a script.
- **2014** : We have proposed a model for recipe recommendation. The developed approach is designed to help the user to search for recipes based on a menu type.

2. <http://www.montpellier.fr/4258-agora-des-savoirs-2016-2017.htm>

3. <https://goo.gl/sIB10F>

9 TECHNICAL SKILLS

IR platforms Terrier, Lucene, Elasticsearch

Languages C, Java, Python, R, PHP, SQL, NoSQL

Tools Apache Storm, Facebook/Twitter/Youtube/Instagram API, IBM Watson, BlueMix

Databases MySQL, MangoDB, PostgreSQL