

Manel Zarrouk

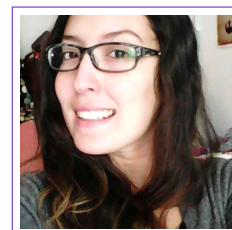
Curriculum Vitae

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Education

- 2012
2015
- 2009
2012
- 2006
2009
- 2006
- PhD Thesis in Informatics**, *Montpellier Laboratory of Informatics, Robotics and Microelectronics*, Montpellier (France).
- Decisional Computing Master's Degree**, *Higher Institute of Management of Gabes*, Gabes (Tunisia).
summa cum laude distinction
- Fundamental License in Multimedia Technology**, *Higher Institute of Multimedia Arts of Mannouba*, Mannouba (Tunisia).
cum laude distinction
- Experimental Scientific Baccaulaureate**, *Technical High School of Medenine*, Medenine (Tunisia).
cum laude distinction

Research interests

Natural Language Processing (NLP) - Semantic Web - Emotion/sentiment/opinion mining - Linked Data - Data Analytics - Decisional Computer Science and management.

PhD thesis

- Title *Endogenous Lexico-semantic Network Consolidation: relation's inference and annotation, inference rules and domain specific language*
- Supervisor Mathieu Lafourcade
- Date 3 November 2015
- Description Developing lexico-semantic resources is a major issue in the Natural Language Processing field. These resources, by making explicit inter alia some knowledge possessed only by humans, aim at providing the ability of a precise and complete text understanding to NLP tasks. Popular resources-building strategies involving crowdsourcing are flowering in NLP and are proved to be successful. However, the resulted resources are not free of errors and lack some important semantic relations. In this PhD thesis, we used the french lexico-semantic network from the project JeuxDeMots as a case-study. We designed an endogenous consolidation system for this type of networks based on inferring and annotating new semantic relations using the already existing ones, as well as extracting and proposing inference rules able to (re)generate a considerable part of the network. In addition, we conceived a domain specific language for manipulating the consolidation system along with the network itself and a prototype was implemented. Viva version <http://www.mzarrouk.net/phd.pdf>

Master thesis

- Title *Frequent Patterns Mining In Time-Sensitive Data Stream (FP-Streaming modified model)*

Supervisor Med Salah Gouider

Description This work studied the problem of frequent patterns mining in Data Stream and specifically the methodology of mining time-sensitive data streams. It presented a possible way to improve an existing algorithm by increasing the temporal accuracy and discarding the out-of-date data by adding a new concept called the "Shaking Point".

Languages

English	Fluent	<i>Daily practice</i>
French	Fluent	<i>Daily practice</i>
Arabic	Fluent	<i>Mother Tongue</i>

Experience

Dec2015

Postdoctoral researcher & Adjunct Lecturer, *Insight Centre for Data Analytics*, National University of Ireland in Galway.

- Applied research:
 - SSIX European Horizon 2020 project (Social Sentiment Indices powered by X-scores)
 - 5 industrial and 2 academic partners
 - Subject : extract and measure meaningful financial sentiment for a given financial target or aspect from Social Media (www.ssix-project.eu);
 - Responsibilities
 - WP1 (Project Management): Acting Coordinator
 - WP3 (Data Management): Data Sampling Methodology
 - WP4 (NLP Pipeline): Gold Standards Building - Aspect Based Sentiment Analysis
 - Retraining Classifiers
 - WP6 (Dissemination): Publications management
 - AllSorter Industrial project
 - 1 industrial partner
 - Subject: Ontology-based CV Ranking
 - Responsibility: General Management
 - Teaching: University teaching fellow
 - *Digital Media Analytics and Visualisation*: Course & exams designing and teaching
 - *Text Technologies for Humanities Students*: Teaching and exam designing
 - Other responsibilities
 - Deputy Unit Leader (Knowledge Discovery Unit)
 - Co-supervision (1 PhD and 3 MsC)
 - Students Reading Group chairing
 - Member of interviews panels (PhD and PotDoc hiring)

2013
2015

University teaching fellow, *University of Montpellier*, France.

(Moniteur)

Teaching:

- Introduction to algorithmic and programming: 22,5 h tutorial and 30 h practical;
- Basic concepts in computer science: 16.5 h practical;
- Operating systems: 16.5 h tutorial and 18 practical;
- Web architecture and programming: 16.5 h tutorial and 16.5 h practical.

2009

Technical Customer Adviser, *Orange*, Tunisia.

Academic activities

Academic Workshop Supervising Research Students - National University of Ireland Galway

Organisation – DOCTISS 2013: annual Conference day of the Graduate School for Information, Structures and Systems sciences (I2S)
– TEXTE team seminar in the LIRMM: <http://mzarrouk.net/sem.html>

Conferences attended CICLING 2013 (Samos), TALN 2013 (Sables d'olonne), TALN 2014 (Marseille), LREC 2014 (Reykjavik)

- Workshops attended** – Workshop on The logic of the lexicon January 2013: Toulouse
– Workshop on mixed methods for syntactic and semantic analysis for french - Mixer (TALN 2013)
- Reviews for** CICLING 2013, TALN 2013 and LREC 2016, SimBig 2016, SemEval 2017, FLAIRS 2017
- Summer school** ESSLLI 2013 (The 25th European Summer School in Logic, Language and Information. Heinrich Heine University in Düsseldorf, Germany, August 5-16, 2013)
- Doctoral units** – Public speaking, interactive pedagogy level 1 (21 h)
– Bioinformatics and ontologies (25 h)

Extra activities

- Gaming Computer games
Sport Swimming, horse riding
Society National Observer in the Higher Independent Authority of the Elections in Tunisia under the Tunisian Association of the Democratic Awakening.
Charity Ex-member of the committee of refugee's reception of Gabes, Tunisia.
Music Graduated from the private music conservatory of Hammamet Tunisia
Cinema Cartoon, horror...
Drawing
Reading

Publications

International conferences

- Vasiliu, L. et al. (2017). *In or Out? Real-Time Monitoring of BREXIT sentiment on Twitter*. SEMANTICS (2017).
- Zarrouk, M. et Lafourcade, M. (2014). *Inferring knowledge with word refinements in a crowdsourced lexical-semantic network*. In proc of the the 25th International Conference on Computational Linguistics (COLING 2014), Dublin, Irlande, 9 p.
- Zarrouk, M., Lafourcade, M. et Joubert, A. (2014). *Consolidation de réseaux lexico-sémantiques par des inférences déductives et inductives*. Journées internationales d'Analyse statistique des Données Textuelles (International days of textual data's statistic analysis) (JADT 2014), Paris, France, 2-6 juin 2014, 12 p.
- Zarrouk, M. et Lafourcade, M. (2014). *Relation Inference in Lexical Networks... with Refinements*. In proc of the 9th International Conference on Language Resources and Evaluation (LREC 2014), Reykjavik, Iceland, 26-31 May 2014, 6 p.
- Zarrouk, M., Lafourcade, M. et Joubert, A. (2014). *About Inferences in a Crowdsourced Lexical-Semantic Network*. In proc of 14th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2014), Gothenburg, Sweden, 26-30 April, 2014, 9 p.
- Ramadier, L., Zarrouk, M., Lafourcade, M. et Micheau, A. (2014). *Spreading Relation Annotations in a Lexical Semantic Network Applied to Radiology*. In proc of 15th International Conference on Intelligent Text Processing and Computational Linguistics (CICLING 2014), Kathmandu, Nepal, April 6-12, 2014, 13 p.
- Ramadier, L., Zarrouk, M., Lafourcade, M. et Micheau, A. (2014). *Annotations et inférences de relations dans un réseau lexico-sémantique : application à la radiologie*. 21 ème Traitement Automatique des Langues Naturelles (International french conference in Natural Language processing) (TALN 2014), Marseille, 2014, 10 p.

- Zarrouk, M., Lafourcade, M. et Joubert, A. (2013). *Inference and reconciliation in a lexical-semantic network*. 14th International Conference on Intelligent Text Processing and Computational Linguistic (CICLING-2013), 13 p.
- Zarrouk, M., Lafourcade, M. et Joubert, A. (2013). *Inférences déductives et réconciliation dans un réseau lexico-sémantique*. 20ème conférence du Traitement Automatique du Langage Naturel 2013 (International french conference in Natural Language processing) (TALN 2013), 14 p.
- Zarrouk, M., Lafourcade, M. et Joubert, A. (2013). *Inductive and deductive inferences in a Crowdsourced Lexical Semantic Network*. In proc of 9th International Conference on Recent Advances in Natural Language Processing (RANLP 2013), Hissar, Bulgaria, September 7-13, 2013, 6 p.

Workshops

- Lafourcade, M., Zarrouk, M. et Joubert, A. (2013). *Inférence de règles déductives par abduction*. Méthodes mixtes pour l'analyse syntaxique et sémantique du français (Mixer), Atelier (TALN-2013), 4 p.
- Chatzikiyriakidis, S., Lafourcade, M., Ramadier, L. et Zarrouk, M. (2015). *Type Theories and Lexical Networks : Using Serious Games as the Basis for Multi-Sorted Typed Systems*. TylLes workshop, ESSLLI, Barcelonap. 6 p.

International revues

- Chatzikiyriakidis, S. Lafourcade, M. Ramadier, L. and Zarrouk, M. (2017). *Type Theories and Lexical Networks: Using Serious Games as the Basis for Multi-Sorted Typed Systems*. Journal of Language Modelling Vol x, No x (2017).
- Ramadier, L., Zarrouk, M., Lafourcade, M. et Micheau, A. (2014). *Inferring Relations and Annotations in Semantic Networks - Application to Radiology*. Journal Computación y Sistemas (peer reviewed open access scientific journal of Computer Science and Engineering). Vol 18, No 2.
- Zarrouk, M. et Gouider, M.S. (2012). *Frequent Patterns mining in time-sensitive Data Stream*. IJCSI International Journal of Computer Science Issues, Vol. 9, Issue 4, No 2, July 2012.

Deliverables

- Kelly, A. Cavallini, A. Fernández, S. Vasiliu, L. Daudert, T. and Zarrouk, M. *Deliverable 5.2 - SSIX Architecture Specification*. 2016. Social Sentiment Analysis Financial IndeXes. ICT-15-2014 Grant: 645425.
- Capelletti, M. Ide, M. Järvinen, T. Zarrouk, M. Hürlimann, M. Fernández, S. Heikkinen, M. *Deliverable 4.3 - 1st Catalogue of SSIX Language Resources*. 2016. Social Sentiment Analysis Financial IndeXes. ICT-15-2014 Grant: 645425.
- Capelletti, M. Hürlimann, M. Davis, B. Fernández, S. Zarrouk, M. McDermott, R. Freitas, A. *Deliverable 4.4 - 2nd Catalogue of SSIX Language Resources*. 2017. Social Sentiment Analysis Financial IndeXes. ICT-15-2014 Grant: 645425.
- Cavallini, A. Condorelli, A. Vasiliu, L. McDermott, R. Zarrouk, M. Hürlimann, M. Fernández, S. *Deliverable 3.5 - Data Sampling*. 2016. Social Sentiment Analysis Financial IndeXes. ICT-15-2014 Grant: 645425.
- Cavallini, A. Hürlimann, M. Zarrouk, M. Khawaja, W. *Deliverable 3.2 - Data Management Plan V2*. 2016. Social Sentiment Analysis Financial IndeXes. ICT-15-2014 Grant: 645425.

References

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