

Meriem BELOUCIF

Postdoctoral Researcher
Copenhagen University
Copenhagen, Denmark

Personal Information

Birth: 09-07-1988, Algiers, Algeria
Address: Office 0.03, Sigurdsgade 41, København, Denmark
Email: mebe@di.ku.dk / belo.meriem@gmail.com
Personal Webpage: <https://belomeriem.github.io/>
Google scholar: Meriem Beloucif
Skype: belo.meriem
Social Networks:
Twitter: @meriembeloucif
g+: Meriem Beloucif

Research Interest

Statistical Machine Translation
Neural Machine Translation
Machine Translation for Low Resource Languages
Semantic Parsing
World Alignment
Transduction Grammars Quality Estimation
Semantic Analysis of text

Current Position

I am currently a Postdoctoral Researcher at COASTAL group under the supervision of Prof. Anders Søgaard. My areas of expertise are semantic parsing for low resource languages, neural machine translation and statistical machine translation.

Education

Mar 2013 – Mar 2018: Doctorate of Philosophy in Computer Science, Hong Kong University of Science and Technology (HKUST), Hong Kong, China

Topic: My PhD degree in the Department of Computer Science and Engineering in Hong Kong University of Science and Technology was under the supervision of Professor Dekai Wu. I proposed the first models that successfully inject semantics while training Statistical Machine Translation models. I have shown that, by only injecting the target language (English) semantic bias, we significantly improve the translation quality for multiple challenging low resource languages including Hausa, Uzbek, Tigrinya, Oromo and much more.

Sept 2008 – Jul 2010: Master in Software Engineering, University of Science and Technology Houari Boumedienne (USTHB), Algiers, Algeria

Grade: 15/20; ranked 4th over 200

Ranked first in the Algerian national selection for graduate school entrance

Sept 2005 – Jul 2008: Bachelor in Academic computer science, University of Science and Technology Houari Boumedienne (USTHB), Algiers, Algeria

Grade: 13/20; ranked 3rd over 80

Awards and Achievements

2018: Passed the thesis defence examination with minor revisions

2017: Passed the thesis proposal presentation

2017: Finalist at the HKUST three minutes thesis competition

2016: Grace Hopper Scholar (250 scholars selected over 3000 applicants world wide)

2016: Google Grant Travel Award to attend ACL (Association for Computational Linguistics)

2016: Hong Kong University of Science and Technology Scholarship

2016: Passed the PhD qualifying exam

2015: Google Anita Borg Scholarship

2015: Hong Kong University of Science and Technology Scholarship

2014: Hong Kong University of Science and Technology Scholarship

2014: Google Grant Travel Award to attend ACL (Association for Computational Linguistics)
2013: Hong Kong University of Science and Technology Scholarship
2011: Ranked first in the Algerian national selection for graduate school entrance
2010: Ranked fourth over two hundred during the master studies (first female)
2008: Ranked third over eighty during the bachelor studies

Internships

2012: Internship at the HLTC lab under the supervision of Prof. Dekai Wu
2010: Internship at the advanced Technologies Center (CDTA), Algiers, Algeria as the master thesis
"Study and implementation of a face authentication and recognition system based on combining Principal Components Analysis (PCA) and Linear Discriminant Analysis (LDA) scores"
2008: Internship at Naftal (Number one oil company, Algeria) as the bachelor thesis
"Design and implementation of an information system for hardware monitoring for NAFTAL Algeria"
2008: Technical training in computer networks at Mozy Telecom, Algiers, Algeria
2008: Entrepreneurship for beginners at the National Agency in Support of Youth Employment (ANSEJ), Algiers, Algeria

Teaching experience

Fall 2018: Guest Lecturer, Introduction to Programming, University of Copenhagen
Fall 2018: Guest Lecturer, Natural Language Processing, University of Copenhagen
Spring 2017: TA, COMP 4911, IT Entrepreneurship, HKUST
Spring 2016: TA, COMP 3211, Fundamentals of Artificial Intelligence at HKUST
Fall 2015: TA, COMP 4221, Introduction to Natural Language Processing at HKUST
Spring 2015: TA, COMP 4211, Machine Learning at HKUST
Fall 2014: TA, COMP 1022q, Introduction to computing with Excel VBA at HKUST

Work experience

2011-2012: System quality engineer at ICOSNET (Internet provider), Algiers, Algeria
2009-2010: Part time librarian at the university Cultural Center

Languages

Arabic (Mother tongue)
 French (Fluent, bilingual)
 English (Fluent)
 German ("Ein bißchen", learning)

Programming Languages

C, C++, Python (beginner level)
 Bash, Shell
 Emacs

Extra-curricular Activities

2017-2018: Re-elected as an Undergrad Hall Tutor, UG Hall One, HKUST, Hong Kong
2017: Finalist at the HKUST 3 minutes thesis competition
2016-2017: Re-elected as an Undergrad Hall Tutor, UG Hall One, HKUST, Hong Kong
2016: Judge for Hackathon HKUST (3rd edition)
2016: Organiser of Hackathon HKUST (3rd edition) for Women Tech Scheme
2015-2016: Re-elected as an Undergrad Hall Tutor, UG Hall One, HKUST, Hong Kong
2015: Co-founder of WISEE, Women in Science, Engineering and entrepreneurship, Hong Kong
2015: Organiser of Hackathon HKUST (2nd edition) for Women consumers scheme
2014-2015: Elected as an Undergrad Hall Tutor, UG Hall One, HKUST, Hong Kong

2012: Microsoft Student Partner, Microsoft Algeria
2010–2012: Vice president of .net club (Computer science student driven club) at USTHB, Algiers, Algeria
2010–2011: Organised XNA Game Challenge, first Algerian game programming competition
2010: Student volunteer at Microsoft Imagine Cup, Algeria National Finals
2010: Member of AIESEC Algeria, LC BENAK

Publications

Meriem BELOUCIF and Dekai WU. "SRL for low resource languages isn't needed for semantic SMT". 21st Annual Conference of the European Association for Machine Translation (EAMT 2018). Alicante: May 2018.

Meriem BELOUCIF and Dekai WU. "Injecting a Semantic Objective Function into Early Stage Learning of Spoken Language Translation". Sixth IEEE Workshop on Spoken Language Technology (SLT 2016). San Diego: Dec 2016.

Meriem BELOUCIF, Markus SAERS and Dekai WU. "Improving word alignment for low resource languages using English monolingual SRL". Sixth Workshop on Hybrid Approaches to Translation (HyTra-6). Osaka, Japan: Dec 2016.

Meriem BELOUCIF and Dekai WU. "Injecting a Semantic Objective Function into Early Stage Learning of Spoken Language Translation." Oriental COCOSDA 2016, 19th International Conference of the Oriental Chapter of the International Committee for the Co-ordination and Standardization of Speech Databases and Assessment Techniques (O-COCOSDA 2016). Bali, Indonesia: Oct 2016.

Meriem BELOUCIF and Dekai WU. "Driving inversion transduction grammar induction with semantic evaluation". 5th Joint Conference on Lexical and Computational Semantics (*SEM 2016), at ACL 2016, 55-63. Berlin: Aug 2016.

Meriem BELOUCIF and Dekai WU. "A semantically confidence-weighted ITG induction algorithm". 3rd International Workshop on Semantic Machine Learning (SML 2016), at IJCAI 2016. New York: Jul 2016.

Meriem BELOUCIF, Markus SAERS, and Dekai WU. "Improving Semantic SMT via Soft Semantic Role Label Constraints on ITG Alignments". Machine Translation Summit XV, Miami, Florida: Oct 2015.

Meriem BELOUCIF, Chi-kiu LO, and Dekai WU. "Improving MEANT Based Semantically Tuned SMT". 11th International Workshop on Spoken Language Translation (IWSLT 2014), 34-41. Lake Tahoe, California: Dec 2014.

Dekai WU, Chi-kiu LO, **Meriem BELOUCIF** and Markus SAERS. "Better Semantic Frame Based MT Evaluation via Inversion Transduction Grammars". Proceedings of SSST-8, Eighth Workshop on Syntax, Semantics and Structure in Statistical Translation (at EMNLP 2014), 22-33. Doha: Oct 2014.

Chi-kiu LO, **Meriem BELOUCIF**, Markus SAERS, and Dekai WU. "XMEANT: Better semantic MT evaluation without reference translations". 52nd Annual Meeting of the Association for Computational Linguistics (ACL 2014), 765-771. Baltimore, Maryland: Jun 2014.

Chi-kiu LO, **Meriem BELOUCIF**, and Dekai WU. "Improving machine translation into Chinese by tuning against Chinese MEANT". 10th International Workshop on Spoken Language Translation (IWSLT 2013). Heidelberg, Germany: Dec 2013.

Dekai WU, Karteek ADDANKI, Markus SAERS, and **Meriem BELOUCIF**. "Learning to Freestyle: Hip Hop Challenge-Response Induction via Transduction Rule Segmentation". 2013 Conference on Empirical Methods in Natural Language Processing (EMNLP 2013), 102-112. Seattle: Oct 2013.

Hobbies

Hiking, Shaolin and Martial Arts, Cooking and Travelling

References

Professor Anders Søgaard (soegaard@di.ku.dk, PhD advisor)
 Professor Dekai WU (dekai@cs.ust.hk, PhD advisor)
 Professor Brian MAK (mak@cs.ust.hk, a member of my thesis committee)
 More can be provided upon request