

# Nedjma Djouhra Ousidhoum

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Citizenship   Algerian  
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## Research Statement

I am a Postdoctoral Research Associate at the Department of Computer Science and Technology of the University of Cambridge. I work with Dr. Andreas Vlachos on fact-checking for journalists. Prior to this, I was a Ph.D. student at the Hong Kong University of Science and Technology (HKUST) where I was working on multilingual toxic content detection and evaluation in NLP under the supervision of Dr. Yangqiu Song and Prof. Dit-Yan Yeung.

I am interested in NLP, computational social science, fairness and explainability.

## Appointments

**September 2021-now** Postdoctoral Research Associate at the University of Cambridge.

**April 2021-August 2021** Postdoctoral Research Assistant at the University of Cambridge.

**September 2018-March 2021** Research Assistant at the Hong Kong University of Science and Technology (HKUST).

**April 2014-August 2014** Postgraduate intern at the Hong Kong University of Science and Technology (HKUST).

**December 2012-April 2014** Research Assistant at the University of Science and Technology Houari Boumediene, Algiers, Algeria.

## Education

**September 2014-August 2021** Ph.D. at the Hong Kong University of Science and Technology, HKUST (*Thesis defended on July 5th 2021*).

**Title** “On the Importance and Challenges of the Experimental Design of Multilingual Toxic Content Detection”

### Committee members

- Dr. Yangqiu Song (*Supervisor*)
- Prof. Dit-Yan Yeung (*Co-supervisor*)
- Prof. Pascale Fung (*HKUST*)
- Dr. Brian Mak (*HKUST*)
- Prof. Nevin Zhang (*HKUST*)
- Dr. Preslav Nakov (*External examiner*)

**September 2010- June 2012** Master of Science in Software Engineering at the University of Science and Technology Houari Boumediene, Algiers, Algeria.

**September 2007- June 2010** Bachelor of Science in Computer Science at the University of Science and Technology Houari Boumediene, Algiers, Algeria.

## Teaching Experience

**Spring 2018** Teaching Assistant of IT Entrepreneurship at HKUST.

**Spring 2017** Teaching Assistant of Introduction to Natural Language Processing at HKUST.

**Spring 2016** Teaching Assistant of Multimedia Computing at HKUST.

**Fall 2015** Teaching Assistant of the C Programming Bridging Course at HKUST.

## Academic Services

Diversity, Equity and Inclusion committee member (financial accessibility chair) at NAACL 2022.

Reviewer for ACL Rolling Review.

Reviewer for EMNLP 2021, ACL 2021, NAACL 2021.

Secondary reviewer for COLING 2020, AAAI 2019.

Co-organizer of the North African in NLP<sup>1</sup> affinity group social at EMNLP 2020, COLING 2020, EACL 2021, NAACL 2021, ACL 2021, NAACL 2022.

## Publications

**Nedjma Ousidhoum**, "On the Importance and Challenges of the Experimental Design of Multilingual Toxic Content Detection". *Ph.D. Thesis*. The Hong Kong University of Science and Technology.

**Nedjma Ousidhoum**, Xinran Zhao, Tianqing Fang, Yangqiu Song, Dit-Yan Yeung, "Probing Toxic Content in Large Pre-Trained Language Models" in Proceedings of the *ACL-IJCNLP 2021*.

**Nedjma Ousidhoum**, Yangqiu Song, Dit-Yan Yeung, "Comparative Evaluation of Label-Agnostic Selection Bias in Multilingual Hate Speech Datasets" in Proceedings of the *EMNLP 2020*.

**Nedjma Ousidhoum**, Zizheng Lin, Hongming Zhang, Yangqiu Song, Dit-Yan Yeung, "Multilingual and Multi-Aspect Hate Speech Analysis" in Proceedings of *EMNLP 2019*.

**Nedjma Ousidhoum**, Nacéra Bensaou, "Towards The Refinement of the Arabic Soundex" in Proceedings of *NLDB 2013*.

**Nedjma Ousidhoum**, Asma Bensalah, Nacéra Bensaou, "A New Classical Arabic Soundex Algorithm" in Proceedings of *The Second Conference on Advances in Communication and Information Technology (CIT 2012)*.

Asma Bensalah, **Nedjma Ousidhoum**, "Étude du Problème de la Correction Phonétique : État de l'art et Conception d'un Algorithme pour la Recherche Approchée dans un Dictionnaire de la Langue Arabe". *Master thesis*, Computer Science Department, University of Science and Technology Houari Boumedienne, Algiers, June 2012.

Venon Takaiteyi Mapfunde, **Nedjma Ousidhoum**, "Automatisation de la Procédure d'accessibilité dans les Réseaux de Petri Récursifs". *Bachelor thesis*, Computer Science Department, University of Science and Technology Houari Bomedienne, Algiers, June 2010.

## Talks

**February 2022** Title *Expectations vs. Reality: Lessons Learned from Working on Toxic Content Detection in NLP*. Language Technology Group Seminar (Hamburg Universität).

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<sup>1</sup><https://sites.google.com/view/NorthAfricansInNLP>

**January 2022** Title *Expectations vs. Reality: Lessons Learned from Working on Toxic Content Detection in NLP*. Cambridge NLIP Seminar (University of Cambridge).

**September 2021** Title *Expectations vs. Reality: Lessons Learned from Working on Toxic Content Detection in NLP*. MilaNLP Group Seminar (Bocconi University, Italy).

**August 2021** Title *Challenges in Toxic Content Detection*. Language and Multimodal AI Lab (LAMA) Group Seminar (Imperial College London).

**November 2020** Title *Normalizing the Experimental Design of Multilingual Hate Speech Detection*. Group Seminar of the Digital Technologies Research Center (National Research Council, Canada).

## Grants and Awards

**2019-2020** The Hong Kong University of Science and Technology Scholarship.

**August 2019** Student volunteer grant for IJCAI2019.

**2018-2019** The Hong Kong University of Science and Technology Scholarship.

**2017-2018** The Hong Kong University of Science and Technology Scholarship.

**2016-2017** The Hong Kong University of Science and Technology Scholarship.

**2015-2016** The Hong Kong University of Science and Technology Scholarship.

**2014-2015** The Hong Kong University of Science and Technology Scholarship.

**December 2012** Accepted at the Computer Science Ph.D. Program of the University of Science and Technology Houari Boumedienne, Algiers, Algeria.

## Other

### *Languages*

**Arabic** mother tongue.

**French** fluent (bilingual).

**English** fluent.

### *Programming Languages*

Python, C, C++, Java.

### *Core Ph.D. Courses*

Advanced Algorithms.

Theory of Computation.

Human Computer Interaction.

Computer Networks.

Knowledge Discovery in Databases.

Machine Learning.

Databases.

Probability Theory and Bayesian Networks.

### *Extra-curricular Activities*

**2019-present** Alhub<sup>a</sup> ambassador.

**2015-2020** English teaching assistant volunteer at Po Leung Kuk Center for disadvantaged children.

**2015-2019** Hall Tutor at HKUST UG Hall IV.

### References

Dr. Yangqiu Song (PhD supervisor).

Prof. Dit-Yan Yeung (PhD co-supervisor).

*(Additional references can be provided upon request.)*

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<sup>a</sup><https://aihub.org/>