

# Nedjma Djouhra Ousidhoum

Email	ndo24@cam.ac.uk
Citizenship	Algerian
Birth	17-09-1990 Algiers, Algeria
Webpage	<a href="https://nedjmaou.github.io">https://nedjmaou.github.io</a>
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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.<sup>1</sup> 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 Boumedienne, 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 Boumedienne, Algiers, Algeria.

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

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<sup>1</sup>I am funded by the MONITIO project <https://monitio-project.eu/>

## 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 co-chair) at NAACL 2022.

Reviewer for EMNLP 2021, ACL 2021, NAACL 2021.

Secondary reviewer for COLING 2020, AAAI 2019.

Co-organizer of the North African in NLP<sup>2</sup> affinity group social at EMNLP 2020, COLING 2020, EACL 2021, NAACL 2021, ACL 2021.

## 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

**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).

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<sup>2</sup><https://sites.google.com/view/NorthAfricansInNLP>

**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 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/>