

# Andrea Madotto

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## EDUCATION

**The Hong Kong University of Science and Technology**, Hong Kong

*Ph.D.* candidate in Electronic & Computer Engineering, 2018 - Present

GPA: 4.3/4.3

**University of Pisa**, Italy

*Master's Degree* in Computer Science, 2015 - 2017

Final mark: 110/110 (Honours)

## SELECTED PUBLICATIONS

[**ICLR2020**] Sumanth Dathathri, *A. Madotto*, Janice Lan, Jane Hung, Eric Frank, Piero Molino, Jason Yosinski, Rosanne Liu. Plug and Play Language Models: a Simple Approach to Controlled Text Generation. Accepted at ICLR 2020.

[**NeurIPS-ConvAI**] *A. Madotto*, Zhaojiang Lin, Chien-Sheng Wu, Jamin Shin, Pascale Fung. Attention over Parameters for Dialogue Systems. Accepted at NeurIPS-ConvAI Workshop 2019, **Oral and Best Paper Award**.

[**EMNLP2019**] *A. Madotto*, Zhaojiang Lin, Jamin Shin, Peng Xu and Pascale Fung. MoEL: Mixture of Empathetic Listeners. Accepted at EMNLP 2019.

[**ACL2019**] Chien-Sheng Wu, *A. Madotto*, Ehsan Hosseini-Asl, Caiming Xiong, Richard Socher, Pascale Fung. Transferable Multi-Domain State Generator for Task-Oriented Dialogue Systems. Accepted at ACL 2019, **Oral and Outstanding Award (Top 0.1% of the submission)**.  
Link: <https://www.aclweb.org/anthology/P19-1078>.

[**ACL2019**] *A. Madotto*, Zhaojiang Lin, Chien-Sheng Wu, Pascale Fung. Personalizing Dialogue Agents via Meta-Learning. Accepted at ACL 2019. Link: <https://www.aclweb.org/anthology/P19-1542>.

[**ACL2018**] *A. Madotto*, Wu, CS., Fung, P. Mem2Seq: Effectively Incorporating Knowledge Bases into End-to-End Task-Oriented Dialog Systems. Accepted at ACL 2018.  
Link: <http://aclweb.org/anthology/P18-1136>.

[**ICASSP2018**] Wu, CS., *A. Madotto*, Winata, GI., Fung, P. End-to-End Dynamic Query Memory Network for Entity-Value Independent Task-Oriented Dialog. International Conference on Acoustics, Speech and Signal Processing ICASSP 2018.  
Link: <https://ieeexplore.ieee.org/abstract/document/8461426>.

[**Nature SciRep 2016**] *Madotto, A* and Liu, J. Super-Spreader Identification Using Meta-Centrality. **Nature** Scientific Report 6, 38994; DOI: [10.1038/srep38994](https://doi.org/10.1038/srep38994) 2016.

Full list available in [Google Scholar](#) or my personal [website](#).

## EXPERIENCE

**Data Science Intern**

UberAI

Jun 2019 – Sept 2019

San Francisco, CA

Conducting research on text-based games (i.e. TextWorld) using reinforcement learning (RL) algorithms. I am mainly worked on exploration-based algorithms (e.g. Go-Explore) for improving RL performance in large action space environments.

**Research Assistant**

HKUST

Sept 2017 – Sept 2018

Hong Kong, HK

Conducted research on Deep Learning Algorithms at the HKUST Centre for Artificial Intelligence Research (CAiRE). I mainly worked on building end-to-end architectures to model dialogue responses. Especially:

- End-to-End dialogue systems using Memory Augmented Neural Networks
- Multi-Task learning for Emotion Representation and Code-Switching

**Teaching Assistant**

HKUST

Feb 2018 – May 2018

Hong Kong, HK

TA of Building Interactive Intelligent Systems (a.k.a. Deep Learning for NLP), joint course of the B.Sc. in CSE and ECE held in the The Hong Kong University of Science and Technology.

- taught and prepared most of the tutorial classes and exercises
- prepared several lectures, in particular RNN (Seq2Seq etc.) and Word Embedding

## PROFESSIONAL ACTIVITIES

**Reviewer** North American Association for Computational Linguistics (NAACL 2019), Empirical Methods in Natural Language Processing (EMNLP 2019), Association for Computational Linguistics (ACL 2019), AAAI Conference on Artificial Intelligence (AAAI 2020), Association for Computational Linguistics (ACL 2020), Computer Speech and Languages (Journal).

## LANGUAGE SKILLS

**Languages:** Italian (mother tongue) • English (Full-Proficiency) • Chinese (basic)

## PROJECTS

## VOLUNTEER ACTIVITIES

**Mentor**

CODERDOJO

Feb 2016 – Jun 2017

Pisa, IT

A volunteering activity to teach programming languages to children (mostly Scratch and Python). Pisa CoderDojo is part of the CoderDojo international initiative. I was also one of the organizers of the first [Toscana DojoCon](#) held in Pisa.