

Andrea Madotto

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EDUCATION

The Hong Kong University of Science and Technology, Hong Kong
Ph.D. in Electronic & Computer Engineering, Sept 2018 - Aug 2021 GPA: 4.3/4.3

University of Pisa, Italy
Master's Degree in Computer Science, 2015 - 2017 Final mark: 110/110 (Honours)

Hong Kong Baptist University, Hong Kong
M.Sc. in Advanced Information Systems, 2014 - 2015 GPA: 3.86/4

University of Perugia, Italy
B.Sc. in Computer Science, 2011 - 2014 Final mark: 110/110 (Honours)

WORK EXPERIENCE

Research Scientist Intern FacebookAI
Remote Aug 2020 – Dec 2020
Conducting research on Continual Learning for Task-Oriented Dialogue Systems. I proposed a large scale benchmark plus a novel architectural-based algorithm for the task.

Data Science Intern UberAI
San Francisco, CA Jun 2019 – Sept 2019
Conducting research on text-based games (i.e. TextWorld), using reinforcement learning (RL) algorithms, and on controllable language generation.

Research Assistant HKUST
Hong Kong, HK Sept 2017 – Sept 2018
Conducting research on deep learning algorithms at the Hong Kong University of Science and Technology. I mainly worked on building end-to-end architectures to model dialogue responses.

PROFESSIONAL ACTIVITY

Tutorial presenter at NeurIPS 2020. Title: "Deeper Conversational AI".

Reviewer NAACL 2019, EMNLP 2019, ACL 2019, AAAI 2020, ACL 2020, EMNLP 2020, ICLR 2020, NeurIPS 2020, AAAI 2021, ICML 2021, NAACL 2021, ACL 2021, and Computer Speech and Languages (Journal).

AWARD

PhD Award 2019-20 School of Engineering (SENG) Academic Award for PhD Students.

Best Paper Award ConvAI-NeurIPS 2019 for Attention Over Parameters for Dialogue Systems.

Outstanding Paper Award ACL-2019 (top 0.1% of the submission) for Transferable Multi-Domain State Generator for Task-Oriented Dialogue Systems.

MEDIA COVERAGE

MIT-Technology Review for the paper: Plug and Play Language Models: a Simple Approach to Controlled Text Generation. Link: [Article](#).

Venture Beats for the paper: Plug and Play Language Models: a Simple Approach to Controlled Text Generation. Link: [Article](#).

Venture Beats for the paper: Exploration Based Language Learning for Text-Based Games. Link: [Article](#).

SELECTED PUBLICATIONS

[EMNLP2021] *Andrea Madotto*, Zhaojiang Lin, Zhenpeng Zhou, Seungwhan Moon, Paul Crook, Bing Liu, Zhou Yu, Eunjoon Cho, Zhiguang Wang, Pascale Fung. Continual Learning in Task-Oriented Dialogue Systems. EMNLP 2021.

[AAAI2021-Demo] *Andrea Madotto*, Zhaojiang Lin, Yejin Bang, Pascale Fung. The Adapter-Bot: All-In-One Controllable Conversational Model. AAAI 2021 Demo.

[EMNLP2020-Findings] *Andrea Madotto*, Etsuko Ishii, Zhaojiang Lin, Sumanth Dathathri, Pascale Fung. Plug-and-Play Conversational Models. EMNLP 2020 Findings.

[EMNLP2020-Findings] *Andrea Madotto*, Samuel Cahyawijaya, Genta Indra Winata, Yan Xu, Zihan Liu, Zhaojiang Lin, Pascale Fung. Learning Knowledge Bases with Parameters for Task-Oriented Dialogue Systems. EMNLP 2020 Findings.

[EMNLP2020] Zhaojiang Lin, *Andrea Madotto*, Genta Indra Winata, Pascale Fung. Mintl: Minimalist transfer learning for task-oriented dialogue systems. EMNLP 2020.

[ICLR2020] Sumanth Dathathri, *Andrea 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. ICLR 2020.

[IJCAI2020] *Andrea Madotto*, Mahdi Namazifar, Joost Huizinga, Piero Molino, Adrien Ecoffet, Huaixiu Zheng, Alexandros Papangelis, Dian Yu, Chandra Khatri, Gokhan Tu. Exploration Based Language Learning for Text-Based Games. IJCAI 2020.

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

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

[ACL2019] Chien-Sheng Wu, *Andrea Madotto*, Ehsan Hosseini-Asl, Caiming Xiong, Richard Socher, Pascale Fung. Transferable Multi-Domain State Generator for Task-Oriented Dialogue Systems. ACL 2019, **Oral and Outstanding Award (Top 0.1% of the submission)**.

[ACL2019] *Andrea Madotto*, Zhaojiang Lin, Chien-Sheng Wu, Pascale Fung. Personalizing Dialogue Agents via Meta-Learning. ACL 2019.

[ACL2018] *Andrea Madotto*, Chien-Sheng Wu, Pascale Fung. Mem2Seq: Effectively Incorporating Knowledge Bases into End-to-End Task-Oriented Dialog Systems. ACL 2018.

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

LANGUAGE SKILLS

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

VOLUNTEER ACTIVITIES

Mentor

Feb 2016 – Jun 2017

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.

CODERDOJO

Pisa, IT