

EDUCATION

École Polytechnique Fédérale de Lausanne, PHD

 Sep 2023 - Present  Lausanne, Switzerland

- › Part of the NLP and NeuroAI labs.

Goldsmiths, University of London, MASTER OF SCIENCE

 Sep 2019 - Sep 2020  London, UK


- › MSc. in Computational Cognitive Neuroscience.

The American University in Cairo, BACHELOR OF SCIENCE

 Sep 2014 - Jun 2018  Cairo, Egypt

- › BSc. in Computer Science - Summa Cum Laude. GPA 4.0
- › President's Cup and Mohamed El Beledy Academic Award for Class Valedictorian.
- › Mohammed Bin Abdulkarim A. Allehedan Award for highest performing STEM student.

Manor House School, INTERNATIONAL GENERAL CERTIFICATE OF SECONDARY EDUCATION

 Sep 2011 - Jun 2014  Cairo, Egypt

- › Outstanding Cambridge Learner Award in AL Computing.

EXPERIENCE

Meta AI, AI RESIDENT

 Nov 2021 - Nov 2022  Seattle, US

- › Worked with Mona Diab and Asli Celikyilmaz.
- › Finished 5 first-author papers during my residency.

Sony AI, AI RESEARCH INTERN

 Oct 2020 - Oct 2021  Tokyo, Japan (Remote)

- › Worked with Michael Spranger, as well as Sam Ritter and Zeb Kurth-Nelson of DeepMind.
- › Finished 3 first-author papers.

Microsoft, SOFTWARE ENGINEER, APPLIED SCIENTIST

 Apr 2019 - Sep 2019  Cairo, Egypt



- › Best Mentor Award
- › Research in Cross-Lingual Model Transfer

Vkansee, MACHINE INTELLIGENCE RESEARCHER

 Jan 2018 - Mar 2019  Cairo, Egypt

- › Conduct research to improve SOTA algorithms in fingerprint matching, spoofing and quality analysis

The American University in Cairo, TEACHING ASSISTANT

 Fall 2015, 2017, Spring 2016  Cairo, Egypt

- › Undergraduate teaching assistant for Deep Learning and Programming Fundamentals courses.

SELECTED FIRST-AUTHOR PUBLICATIONS

- › OPT-R: EXPLORING THE ROLE OF EXPLANATIONS IN FINETUNING AND PROMPTING FOR REASONING SKILLS OF LARGE LANGUAGE MODELS. **NL-Reasoning 2023 (ACL)**. *Poster Presentation*.
- › HOW TO LEARN AND REPRESENT ABSTRACTIONS: AN INVESTIGATION USING SYMBOLIC ALCHEMY. **AutoML Late-Breaking Workshop 2022**. *Poster Presentation*.
- › TOKEN: TASK DECOMPOSITION AND KNOWLEDGE INFUSION FOR FEW-SHOT HATE SPEECH DETECTION. **EMNLP 2022**. *Oral Presentation*.
- › A REVIEW OF LANGUAGE MODELS AS KNOWLEDGE BASES. **Preprint**.
- › DEPTH-WISE ATTENTION (DWATT): A LAYER FUSION METHOD FOR DATA-EFFICIENT CLASSIFICATION. **ENLSP-II 2022 (NeurIPS)**. *Poster Presentation*.
- › THE EMERGENCE OF ABSTRACT AND EPISODIC NEURONS IN EPISODIC META-RL. **MemARI 2022 (NeurIPS)**. *Venue Spotlight, Oral Presentation*.
- › EPIPHENOMENAL REPRESENTATIONS OF ABSTRACT RULES IN A CONNECTIONIST MODEL OF THE DELAYED MATCH TO SAMPLE TASK. **COSYNE 2022**. *Poster Presentation*.
- › META AI AT ARABIC HATE SPEECH 2022: MULTITASK LEARNING WITH SELF-CORRECTION FOR HATE SPEECH CLASSIFICATION. **OS-ACT5 2022 (LREC)**. *Best Paper Award, Oral Presentation*.
- › ADAPTING MARBERT FOR IMPROVED ARABIC DIALECT IDENTIFICATION: SUBMISSION TO THE NADI 2021 SHARED TASK. **WANLP 2021 (EACL)**. *Oral Presentation, SOTA*.
- › DEEP DIACRITIZATION: EFFICIENT HIERARCHICAL RECURRENCE FOR IMPROVED ARABIC DIACRITIZATION. **WANLP 2020 (COLING)**. *Oral Presentation, SOTA*.

PEER REVIEW


- › **Conferences:** EMNLP 2023, 2022. ACL 2023. AutoML 2022.
- › **Workshops:** ICBINB 2023, 2022, 2021. ENLSP 2022. AutoML Workshop 2022. Meta-Learning 2021, 2020. Learning-to-Learn 2021.

SELECTED TALKS

- › AI Belmasry. Guest Speaker.
- › Cohere For AI Community Talk. Speaker.
- › TEDxMIU. Speaker. Representation Matters: Celebrating Egyptians in the AI Revolution.
- › Mada Masr Podcast. Guest Speaker.
- › NeurIPS 2021 Egypt Meetup. Panelist.
- › Goldsmiths, University of London Career Event. Speaker.
- › IndabaX Egypt 2019. Speaker.

OTHER EDUCATION

Tsinghua University, DEEP LEARNING SUMMER SCHOOL

 July 2017  Beijing, China

- › Outstanding Performance Award in Summer School.

Stony Brook University, SEMESTER ABROAD

 Aug 2016 - Dec 2016  New York, US

- › Best Junior Award in ACM Regional Qualification Contest.
- › Abdallah Jum'ah Study Abroad Scholarship.