# METE (MAHAMMAD) ISMAYILZADA

mismayilza@gmail.com

mete.is

@mismayil

in mismayilzada

I am a second-year Ph.D. student at EPFL and a Visiting Researcher at USI. My research interests broadly lie in the nature of robust artificial intelligence, language, creativity, and mind. Currently, my research focuses on understanding and improving machines' creative capabilities.

## **Experience**

#### Research

2025 – Present Visiting Researcher. Università della Svizzera italiana. Lugano, Switzerland.

2023 – 2025 **Research Assistant.** Idiap Research Institute. *Martigny, Switzerland*.

Fall 2022 Research Assistant. AI Lab. EPFL. Lausanne, Switzerland.

Research on causal reasoning. Work published at ACL Findings.

Summer 2022 **Research Intern.** Sony Inc. *Tokyo, Japan.* 

Developed a dialogue system that can imitate characters.

## **Engineering**

2019 – 2021 Software/ML Engineer. integrate AI. *Toronto, Canada.* 

Designed and built ML tools to automate model training, prediction, and deployment.

2017 – 2019 Co-founder/CTO. Destin AI. *Toronto, Canada.* 

Designed and developed a chatbot and marketplace platform. Participation in startup incubators Next AI and DMZ.

2017 – 2018 **Software Engineer.** Bluecat Networks. *Toronto, Canada.* 

2016 – 2017 **Software Engineer.** Cisco Systems. *Ottawa, Canada.* 

Summer 2015 Software Engineer Intern. Freescale Semiconductors. Ottawa, Canada.

Summer 2014 Software Engineer Intern. TD Bank Securities. Toronto, Canada.

Summer 2013 Software Developer Intern. Azercell MMC. Baku, Azerbaijan.

## **Education**

2023 – Present **Ph.D. Computer Science.** EPFL, Switzerland.

Research on computational creativity.

2021 – 2023 M.Sc. Data Science. EPFL, Switzerland.

Thesis: CRoW: Benchmarking Commonsense Reasoning in Real-World Tasks (Published at EMNLP 2023).

2012 – 2016 **B.Sc. Computer Science, With Distinction.** University of Waterloo, Canada.

### **Research Publications**

## **Preprint**

M. Ismayilzada, D. Paul, A. Bosselut, and L. van der Plas, "Creativity in ai: progresses and challenges", (2024).

#### **Conference Proceedings**

**M. Ismayilzada**, C. Stevenson, and L. van der Plas, "Evaluating creative short story generation in humans and large language models", in Proceedings of the iccc 2025 (2025).

- M. Ismayilzada, D. Circi, J. Sälevä, H. Sirin, A. Köksal, B. Dhingra, A. Bosselut, D. Ataman, and L. V. D. Plas, "Evaluating morphological compositional generalization in large language models", in Proceedings of the naacl 2025 (volume 1: long papers) (Apr. 2025), pp. 1270–1305.
- M. Ismayilzada, D. Paul, S. Montariol, M. Geva, and A. Bosselut, "CRoW: benchmarking commonsense reasoning in real-world tasks", in Proceedings of the emnlp 2023 (volume 1: long papers) (Dec. 2023), pp. 9785–9821.
- M. Ismayilzada and A. Bosselut, "Kogito: a commonsense knowledge inference toolkit", in Proceedings of the eacl 2023 system demonstrations (May 2023), pp. 96–104.
- D. Paul, **M. Ismayilzada**, M. Peyrard, B. Borges, A. Bosselut, R. West, and B. Faltings, "REFINER: reasoning feedback on intermediate representations", in Proceedings of the eacl 2024 (volume 1: long papers) (Mar. 2024), pp. 1100–1126.
- S. Gao, **M. Ismayilzada**, M. Zhao, H. Wakaki, Y. Mitsufuji, and A. Bosselut, "DiffuCOMET: contextual commonsense knowledge diffusion", in Proceedings of the acl 2024 (volume 1: long papers) (Aug. 2024), pp. 4809–4831.
- S. Cui, L. Milikic, Y. Feng, **M. Ismayilzada**, D. Paul, A. Bosselut, and B. Faltings, "Exploring defeasibility in causal reasoning", in Findings of the acl 2024 (Aug. 2024), pp. 6433–6452.

## Skills

Languages English, French, Turkish, Russian, Azerbaijani

Coding Python, Java, C, C++

Databases MySQL, PostgreSQL, MongoDB

Web Dev HTML, CSS, JavaScript, node.js, React.js

ML pytorch, pandas, transformers, scikit-learn, seaborn

Misc. | git, linux, MLOps, DevOps, LaTeX

## Misc

#### **Teaching**

Spring 2023-2025 **Teaching Assistant.** Modern NLP. EPFL.

Fall 2024 **Teaching Assistant.** Distributed Information Systems. EPFL.

Fall 2022 **Teaching Assistant.** Applied Data Analysis. EPFL.

#### **Service**

2024 **Reviewer.** ACL ARR, SEM, EACL Student Research Workshop.

**Volunteer.** Perspectives on AI Symposiums, Idiap Research Institute.

#### **Awards**

Full State Scholarship, Full funding for undergraduate studies at the University of Waterloo, Government of Azerbaijan.

2012 **Certificate of Distinction**, Euclid Mathematics Contest, University of Waterloo.

Presidential Scholarship, Awarded to top students entering university studies, Government of Azerbaijan.