# METE (MAHAMMAD) ISMAYILZADA

mete.is

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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 and creativity. Currently, my research focuses on understanding and improving LLMs' 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.

## **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, A. L. Jr., S. A. Luchini, R. Patel, A. Bosselut, L. van der Plas, and R. Beaty, "Creative preference optimization", (2025).
- 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-Present 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.