# METE (MAHAMMAD) ISMAYILZADA

mete.is

@mismayil

in mismayilzada

My interests broadly lie within the nature of robust artificial intelligence, language, creativity, and mind. Currently, my research focuses on understanding and improving the creative capabilities of machines.

# **Experience**

#### Research

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

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

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

## **Engineering**

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

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

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).
- M. Ismayilzada, D. Circi, J. Sälevä, H. Sirin, A. Köksal, B. Dhingra, A. Bosselut, L. van der Plas, and D. Ataman, "Evaluating morphological compositional generalization in large language models", (2024).

#### **Conference Proceedings**

- M. Ismayilzada, D. Paul, S. Montariol, M. Geva, and A. Bosselut, "CRoW: benchmarking commonsense reasoning in real-world tasks", in Proceedings of the 2023 conference on empirical methods in natural language processing (Dec. 2023), pp. 9785–9821.
- M. Ismayilzada and A. Bosselut, "Kogito: a commonsense knowledge inference toolkit", in Proceedings of the 17th conference of the european chapter of the association for computational linguistics: 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 18th conference of the european chapter of the association for computational linguistics (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 62nd annual meeting of the association for computational linguistics (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 association for computational linguistics 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

## **Teaching**

Spring 2023, 2024 **Teaching Assistant.** Modern NLP. EPFL.

Fall 2023 **Teaching Assistant.** Applied Data Analysis. EPFL.

#### Service

**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.

#### **Projects**

2024 Parrot, Educational toolkit to interact with OpenAI models.

2022 **kogito**, A Python Commonsense Knowledge Inference Toolkit.