METE (MAHAMMAD) ISMAYILZADA

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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*.

Research on computational creativity.

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).
- 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. | git, linux, MLOps, DevOps, LaTeX

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

Parrot, Educational toolkit to interact with OpenAI models.

kogito, A Python Commonsense Knowledge Inference Toolkit.