Akbar Karimi

Professional Career

- 2023 Present **Postdoctoral Researcher**, University of Bonn, Germany. Advisor: Prof. Lucie Flek.
 - 2022 2023 **Postdoctoral Researcher**, University of Marburg, Germany. Advisor: Prof. Lucie Flek.
 - 2018 2022 **Ph.D. in Information Technologies**, University of Parma, Italy. Thesis: Text Analysis with Deep Learning and Data Augmentation. Advisor: Prof. Andrea Prati.
 - 2014 2017 M.Sc. in Computer Science, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran.
 Thesis: Parallel Sentence Extraction from Comparable Corpora Using Statistical Machine Translation. Advisors: Dr. Ebrahim Ansari and Dr. Bahram Sadeghi Bigham.
 - 2008 2012 B.Sc. in Computer Engineering, Azad University of Zanjan, Iran.

Teaching & Non-Scientific Experiences

- 2024 Scientific Coordinator, CAISA & Lamarr Institute, University of Bonn, Germany.
 - 2024 Lecturer, Dialog Systems, University of Bonn, Germany.
 - 2023 Co-lecturer, Introduction to NLP, University of Marburg, Germany.
 - 2022 Co-lecturer, Dialog Systems, University of Marburg, Germany.
- 2018 Lecturer, Operating Systems Laboratory, IASBS, Zanjan, Iran.
- 2009 2010 Teaching Assistant, Differential Equations, Azad University of Zanjan, Iran.
 2009 Teaching Assistant, Discrete Math, Azad University of Zanjan, Zanjan, Iran.

Academic Services

Reviewer ACL, TPAMI, WASSA, HuCLLM, TAFFC, NEPL, TNNLS, AI Communications.

Awards & Honors

- 2018 Ph.D. Scholarship funded by the University of Parma and Adidas AG.
- 2017 Ranked 24th among 1249 participants in the National PhD Examination, Iran.
- 2014 **Ranked 43rd** among ≥ 3000 participants in the National Master's Examination, Iran.

Publications & Preprints

- 1 Abedin, Zain Ul, Shahzeb Qamar, Lucie Flek, and **Akbar Karimi**. ArithmAttack: Evaluating Robustness of LLMs to Noisy Context in Math Problem Solving. arXiv preprint arXiv:2501.08203 (2025)..
- 2 Arora, Pulkit, Akbar Karimi, and Lucie Flek. Exploring Robustness of LLMs to Sociodemographically-Conditioned Paraphrasing. arXiv preprint arXiv:2501.08276 (2025)...
- 3 Saala, Timo, Lucie Flek, Alexander Jung, Akbar Karimi, Alexander Schmidt, Matthias Schott, Philipp Soldin, and Christopher Wiebusch. *Enforcing Fundamental Relations via* Adversarial Attacks on Input Parameter Correlations. arXiv preprint arXiv:2501.05588 (2025)..

- 4 Aliakbarzadeh, Amirhossein, Lucie Flek and Akbar Karimi. Exploring Robustness of Multilingual LLMs on Real-World Noisy Data. WiNLP at EMNLP 2024.
- 5 Nie, Shangrui, Michael Fromm, Charles Welch, Rebekka Görge, **Akbar Karimi**, Joan Plepi, Nazia Afsan Mowmita, Nicolas Flores-Herr, Mehdi Ali, and Lucie Flek. *Do Multilingual Large Language Models Mitigate Stereotype Bias?* C3NLP Workshop at ACL 2024.
- 6 Karimi, Akbar, and Lucie Flek. CAISA at SemEval-2023 Task 8: Counterfactual Data Augmentation for Mitigating Class Imbalance in Causal Claim Identification. SemEval at ACL 2023.
- 7 Karimi, Akbar, and Lucie Flek. *Caisa@ smm4h'22: Robust Cross-Lingual Detection of Disease Mentions on Social Media with Adversarial Methods.* SMM4H 2022.
- 8 Luna De Bruyne, **Akbar Karimi**, Orphée De Clercq, Andrea Prati, and Véronique Hoste. Aspect-Based Emotion Analysis and Multimodal Coreference: A Case Study of Customer Comments on Adidas Instagram Posts. LREC Conference 2022.
- 9 Leonardo Rossi, Akbar Karimi, and Andrea Prati. Improving Localization for Semi-Supervised Object Detection. ICIAP Journal 2022.
- 10 Leonardo Rossi, **Akbar Karimi**, and Andrea Prati. *Self-Balanced R-CNN for Instance Segmentation*. JVCIR Journal 2022.
- 11 Karimi, Akbar, Leonardo Rossi, and Andrea Prati. *AEDA: An Easier Data Augmentation Technique for Text Classification*. EMNLP Conference Findings 2021.
- 12 Karimi, Akbar, Leonardo Rossi, and Andrea Prati. UniParma at SemEval-2021 Task 5: Toxic Spans Detection Using CharacterBERT and Bag-of-Words Model. SemEval at ACL-IJCNLP 2021.
- 13 Rossi, Leonardo, Akbar Karimi, and Andrea Prati. *Recursively Refined R-CNN: Instance Segmentation with Self-Rol Rebalancing.* CAIP Conference 2021).
- 14 Karimi, Akbar, Leonardo Rossi, and Andrea Prati. *Improving BERT Performance for Aspect-Based Sentiment Analysis.* ICNLSP Conference 2021.
- 15 Rossi, Leonardo, **Akbar Karimi**, and Andrea Prati. *A novel region of interest extraction layer for instance segmentation*. ICPR IEEE Conference 2021.
- 16 Karimi, Akbar, Leonardo Rossi, and Andrea Prati. *Adversarial training for aspect-based sentiment analysis with bert*. ICPR IEEE Conference 2021.
- 17 Karimi, Akbar, Ebrahim Ansari, and Bahram Sadeghi Bigham. *Extracting an English-Persian* Parallel Corpus from Comparable Corpora. LREC Conference 2018.