

# **18th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2024)**

Student Research Workshop

St. Julian's, Malta  
21 - 22 March 2024

ISBN: 978-1-7138-9444-5

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2024) by the Association for Computational Linguistics  
All rights reserved.

Printed with permission by Curran Associates, Inc. (2024)

For permission requests, please contact the Association for Computational Linguistics  
at the address below.

Association for Computational Linguistics  
209 N. Eighth Street  
Stroudsburg, Pennsylvania 18360

Phone: 1-570-476-8006  
Fax: 1-570-476-0860

[acl@aclweb.org](mailto:acl@aclweb.org)

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2633  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## Table of Contents

<i>AutoAugment Is What You Need: Enhancing Rule-based Augmentation Methods in Low-resource Regimes</i>	
Juhwan Choi, Kyohoon Jin, Junho Lee, Sangmin Song and YoungBin Kim .....	1
<i>Generating Diverse Translation with Perturbed kNN-MT</i>	
Yuto Nishida, Makoto Morishita, Hidetaka Kamigaito and Taro Watanabe .....	9
<i>The KIND Dataset: A Social Collaboration Approach for Nuanced Dialect Data Collection</i>	
Asma Z. Yamani, Raghad Alziyady, Reem AlYami, Salma A. Albelali, Leina A. Albelali, Jawharah Almulhim, Amjad K. Alsulami, Motaz Alfarraj and Rabeah A. Al-Zaidy .....	32
<i>Can Stanza be Used for Part-of-Speech Tagging Historical Polish?</i>	
Maria Irena Szawerna .....	44
<i>Toward Zero-Shot Instruction Following</i>	
Renze Lou and Wenpeng Yin .....	50
<i>UnMASKed: Quantifying Gender Biases in Masked Language Models through Linguistically Informed Job Market Prompts</i>	
Iñigo Parra .....	61
<i>Distribution Shifts Are Bottlenecks: Extensive Evaluation for Grounding Language Models to Knowledge Bases</i>	
Yiheng Shu and Zhiwei Yu .....	71
<i>AttriSage: Product Attribute Value Extraction Using Graph Neural Networks</i>	
Rohan Potta, Mallika Asthana, Siddhant Yadav, Nidhi Goyal, Sai Amrit Patnaik and Parul Jain .....	89
<i>HypoTermQA: Hypothetical Terms Dataset for Benchmarking Hallucination Tendency of LLMs</i>	
Cem Uluoglakci and Tugba Taskaya Temizel .....	95
<i>Arabic Synonym BERT-based Adversarial Examples for Text Classification</i>	
Norah F Alshahrani, Saied Alshahrani, Esma Wali and Jeanna Matthews .....	137
<i>A Hypothesis-Driven Framework for the Analysis of Self-Rationalising Models</i>	
Marc Braun and Jenny Kunz .....	148
<i>Align before Attend: Aligning Visual and Textual Features for Multimodal Hateful Content Detection</i>	
Eftekhar Hossain, Omar Sharif, Mohammed Moshiul Hoque and Sarah Masud Preum .....	162
<i>Topic-guided Example Selection for Domain Adaptation in LLM-based Machine Translation</i>	
Seth Aycock and Rachel Bawden .....	175
<i>Reforging : A Method for Constructing a Linguistically Valid Japanese CCG Treebank</i>	
Asa Tomita, Hitomi Yanaka and Daisuke Bekki .....	196
<i>Thesis Proposal: Detecting Agency Attribution</i>	
Igor Ryazanov and Johanna Björklund .....	208
<i>A Thesis Proposal ClaimInspector Framework: A Hybrid Approach to Data Annotation using Fact-Checked Claims and LLMs</i>	
Basak Bozkurt .....	215

<i>Large Language Models for Mathematical Reasoning: Progresses and Challenges</i>	225
Janice Ahn, Rishu Verma, Renze Lou, Di Liu, Rui Zhang and Wenpeng Yin .....	225
<i>Representation and Generation of Machine Learning Test Functions</i>	238
Souha Ben Hassine and Steven R. Wilson .....	238
<i>The Generative AI Paradox in Evaluation: What It Can Solve, It May Not Evaluate</i>	248
Juhyun Oh, Eunsu Kim, Inha Cha and Alice Oh .....	248
<i>Generative Data Augmentation using LLMs improves Distributional Robustness in Question Answering</i>	258
Arijit Ghosh Chowdhury and Aman Chadha .....	258
<i>Japanese-English Sentence Translation Exercises Dataset for Automatic Grading</i>	266
Naoki Miura, Hiroaki Funayama, Seiya Kikuchi, Yuchiroh Matsubayashi, Yuya Iwase and Kentaro Inui .....	266
<i>The Impact of Integration Step on Integrated Gradients</i>	279
Masahiro Makino, Yuya Asazuma, Shota Sasaki and Jun Suzuki .....	279
<i>GesNavi: Gesture-guided Outdoor Vision-and-Language Navigation</i>	290
Aman Jain, Teruhisa Misu, Kentaro Yamada and Hitomi Yanaka .....	290
<i>Can docstring reformulation with an LLM improve code generation?</i>	296
Nicola Dainese, Alexander Ilin and Pekka Marttinen .....	296
<i>Benchmarking Diffusion Models for Machine Translation</i>	313
Yunus Demirag, Danni Liu and Jan Niehues .....	313
<i>Forged-GAN-BERT: Authorship Attribution for LLM-Generated Forged Novels</i>	325
Kanishka Silva, Ingo Frommholz, Burcu Can, Fred Blain, Raheem Sarwar and Laura Ugolini .....	325
<i>Thesis Proposal: Detecting Empathy Using Multimodal Language Model</i>	338
Md Rakibul Hasan, Md Zakir Hossain, Aneesh Krishna, Shafin Rahman and Tom Gedeon ..	338
<i>Toward Sentiment Aware Semantic Change Analysis</i>	350
Roksana Goworek and Haim Dubossarsky .....	350
<i>Dynamic Task-Oriented Dialogue: A Comparative Study of Llama-2 and Bert in Slot Value Generation</i>	358
Tiziano Labruna, Sofia Brenna and Bernardo Magnini .....	358