

ArgMining 2025

The 12th Argument Mining Workshop

Proceedings of the Workshop

July 31, 2025

The ArgMining organizers gratefully acknowledge the support from the following sponsors.



©2025 Association for Computational Linguistics

Order copies of this and other ACL proceedings from:

Association for Computational Linguistics (ACL)
317 Sidney Baker St. S
Suite 400 - 134
Kerrville, TX 78028
USA
Tel: +1-855-225-1962
acl@aclweb.org

ISBN 979-8-89176-258-9

Introduction

Argument Mining (also known as “argumentation mining”) is a well-established research area within computational linguistics that started with focusing on automatically identifying and classifying argument elements, covering several text genres such as legal documents, news articles, online debates, scholarly data, and many more. Aside from mining argumentative components, the field focuses on studying argument quality assessment, argument persuasiveness, the synthesis of argumentative texts, explainable argumentation and multimodal argument mining. Several tutorials have been held at major NLP conferences showing the continuously increasing interest in argument mining.

Besides providing a forum to discuss and exchange cutting edge research in this field, a secondary goal of this year’s edition has been to broaden the disciplinary scope of the workshop by inviting other disciplines (e.g., (computational) social and political science, psychology, humanities) as well as other subareas of NLP to actively participate in the workshop and further shape the field of argument mining.

The success of our goal in broadening the disciplinary scope of the workshop, as well as the fast growing interest in research topics related to argument mining and computational argumentation in the NLP community are evidenced with the richness and variety of submissions received. The 12th Workshop on Argument Mining allowed the submission of long and short papers for the main workshop track, as well as extended abstracts and PhD proposals for the non-archival track new to this year’s edition. Furthermore, the workshop hosted two shared tasks: the Critical Questions Generation Task, and MM-ArgFallacy2025: Multimodal Argumentative Fallacy Detection and Classification on Political Debates. This year’s edition of the ArgMining workshop had 68 submissions (28 in 2024, 40 in 2023, 37 in 2022, 39 in 2021, and 30 in 2020). The 68 submissions were distributed as follows, 44 were submitted to the main workshop track, 7 to the non-archival track, and 17 were shared task papers. For the main workshop, we accepted 22 papers (15 long, 7 short), making an acceptance rate of 50%. The 7 submitted non-archival papers were accepted for poster presentations.

The 12th Workshop on Argument Mining hosted Andreas Vlachos as the keynote speaker, addressing the topic of “Fact-checking as a conversation”.

Aligned with this year’s special theme, we will also host a panel titled “Broadening the scope of Argument Mining”, which will bring together Argument Mining experts with researchers from the broader interdisciplinary community connected with Argument Mining (Linguistics, Political Science, Communication Science, Computational Social Science). Our panelists are: Roxanne El Baff (German Aerospace Center-DLR, Bauhaus-Universität Weimar), Sebastian Haunss (University of Bremen), Julia Mendelsohn (University of Bremen), Smaranda Muresan (Columbia University), Elena Musi (University of Liverpool).

We thank our Program Committee members for their continuous support and helpful input. Also, we thank IBM for sponsoring the Best Paper award and the members of our Best Paper Selection Committee: Rodrigo Agerri (University of the Basque Country), Paolo Torroni (University of Bologna), and Elena Cabrio (Université Côte d’Azur). The awards are announced on the official workshop website: <https://argmining-org.github.io/2025/>.

We would also like to thank the Cluster of Excellence Cognitive Interaction Technology at the University of Bielefeld (CITEC) and the German Society for Computational Linguistics (GSCL) for supporting the workshop.

We would also like to thank everyone who has been involved with this year’s workshop in one way or another. Thank you very much!

Elena Chistova, Philipp Cimiano, Shohreh Haddadan, Gabriella Lapesa, and Ramon Ruiz-Dolz
(*ArgMining 2025 co-chairs*)

Organizing Committee

Organizing Committee

Elena Chistova, Laboratory for Analysis and Controllable Text Generation Technologies, RAS, Russia

Philipp Cimiano, Bielefeld University, Germany

Shohreh Haddadan, Moffitt Cancer Center, United States

Gabriella Lapesa, GESIS, Leibniz Institute for the Social Sciences (Cologne) and Heinrich-Heine University of Dusseldorf

Ramon Ruiz-Dolz, Centre for Argument Technology, University of Dundee, United Kingdom

Program Committee

Program Committee

Rodrigo Agerri, University of the Basque Country
Yamen Ajjour, Universität Hannover
Alaa Alhamzeh, Universität Passau
Ashish Anand, Indian Institute of Technology, Guwahati
Elena Cabrio, Université Côte d’Azur
Blanca Calvo Figueras, Universidad del País Vasco
Chung-Chi Chen, AIST, National Institute of Advanced Industrial Science and Technology
Johannes Daxenberger, summetix GmbH
Roxanne El Baff, German Aerospace Center and Bauhaus-University Weimar
Mohamed Elaraby, University of Pittsburgh
Neele Falk, Universität Stuttgart
Debela Gemechu, Centre for Argument Technology, University of Dundee, United Kingdom
Lynn Greschner, Otto-Friedrich Universität Bamberg
Ankita Gupta, University of Massachusetts Amherst
Annette Hautli-Janisz, Universität Passau
Khalid Al Khatib, University of Groningen
Johannes Kiesel, GESIS – Leibniz Institute for the Social Sciences
Zlata Kikteva, Universität Passau
Nadin Kökciyan, University of Edinburgh
John Lawrence, University of Dundee
Davide Liga, University of Luxembourg
Eimear Maguire, University of Dundee
Maximilian Maurer, GESIS Leibniz Institute for the Social Sciences
Elena Musi, University of Liverpool
Irina Nikishina, University of Hamburg
Matthias Orlikowski, Universität Bielefeld
Joonsuk Park, University of Richmond
Martin Pereira, University of Santiago de Compostela
Chris Reed, University of Dundee
Julia Romberg, GESIS Leibniz Institute for the Social Sciences
Ameer Saadat-Yazdi, University of Edinburgh
Sougata Saha, Mohamed bin Zayed University of Artificial Intelligence
Patrick Saint-Dizier, CNRS
Gabriella Skitalinskaya, Duolingo
Manfred Stede, Universität Potsdam
Benno Stein, Bauhaus Universität Weimar
Regina Stodden, Universität Bielefeld
Eva Maria Vecchi, University of Stuttgart
Serena Villata, Université Côte d’Azur, Inria, CNRS, I3S, France
Henning Wachsmuth, Leibniz Universität Hannover
Vern R. Walker, Hofstra University
Dexter Williams, University of Illinois at Urbana-Champaign
Hiroaki Yamada, Institute of Science Tokyo
Tangming Yuan, University of York
Yang Zhong, University of Pittsburgh

Shared Task Organizers

Eleonora Mancini, DISI, University of Bologna, Italy
Federico Ruggeri, DISI, University of Bologna, Italy
Paolo Torroni, DISI, University of Bologna, Italy
Serena Villata, Université Côte d’Azur, Inria, France
Blanca Calvo Figueras, HiTZ Center - Ixa, University of the Basque Country UPV/EHU , Spain
Rodrigo Agerri, HiTZ Center - Ixa, University of the Basque Country UPV/EHU , Spain
Maite Heredia, HiTZ Center - Ixa, University of the Basque Country UPV/EHU , Spain
Jaione Bengoetxea, HiTZ Center - Ixa, University of the Basque Country UPV/EHU , Spain
Elena Cabrio, Université Côte d’Azur, Inria, CNRS, I3S, France
Serena Villata, Université Côte d’Azur, Inria, CNRS, I3S, France

Keynote Talk

Fact-checking as a conversation

Andreas Vlachos

Department of Computer Science and Technology, University of Cambridge

Abstract: Misinformation is considered one of the major challenges of our times resulting in numerous efforts against it. Fact-checking, the task of assessing whether a claim is true or false, is considered a key in reducing its impact. In the first part of this talk I will present our recent and ongoing work on automating this task using natural language processing, including neurosymbolic inference, and using a search engine as a source of evidence. In the second part of this talk, I will present an alternative approach to combatting misinformation via dialogue agents, and present results on how internet users engage in constructive disagreements and problem-solving deliberation.

Bio: Andreas Vlachos is a professor of NLP and Machine Learning at the University of Cambridge. Among the many things he has worked on, we find constructiveness in argumentation, fact checking, media bias, dialogue modeling.

Panel

Broadening the scope of Argument Mining

The aim of the panel is to establish a dialogue with Argument Mining researchers (from the panel itself and the workshop audience) on a variety of themes such as a) the challenges encountered by NLP research dealing with fine-grained conceptualizations which are typically aimed at when targeting theory-based questions, b) the progress that Argument Mining (and in general, NLP) can experience when challenged with interdisciplinary work, and c) the boundaries that nowadays LLM's superpowers should nevertheless be confronted with: the fact that LLMs (allegedly) "can do everything because it has seen everything" does not mean that any possible task should be done with them — this is particularly relevant with argument mining research, which touches upon crucial issues such as opinion mining, with the potential for manipulative uses of the resulting technology.

Table of Contents

<i>“The Facts Speak for Themselves”: GPT and Fallacy Classification</i> Erisa Bytyqi and Annette Hautli-Janisz	1
<i>Exploring LLM Priming Strategies for Few-Shot Stance Classification</i> Yamen Ajjour and Henning Wachsmuth	11
<i>Toward Reasonable Parrots: Why Large Language Models Should Argue with Us by Design</i> Elena Musi, Nadin Kökciyan, Khalid Al Khatib, Davide Ceolin, Emmanuelle Dietz, Klara Maximiliane Gutekunst, Annette Hautli-Janisz, Cristián Santibáñez, Jodi Schneider, Jonas Scholz, Cor Steging, Jacky Visser and Henning Wachsmuth	24
<i>Retrieving Argument Graphs Using Vision Transformers</i> Kilian Bartz, Mirko Lenz and Ralph Bergmann	32
<i>Old but Gold: LLM-Based Features and Shallow Learning Methods for Fine-Grained Controversy Analysis in YouTube Comments</i> Davide Bassi, Erik Bran Marino, Renata Vieira and Martin Pereira	46
<i>Multi-Agent LLM Debate Unveils the Premise Left Unsaid</i> Harvey Bonmu Ku, Jeongyeol Shin, Hyoun Jun Lee, Seonok Na and Insu Jeon	58
<i>Leveraging Graph Structural Knowledge to Improve Argument Relation Prediction in Political Debates</i> Deborah Dore, Stefano Faralli and Serena Villata	74
<i>On Integrating LLMs Into an Argument Annotation Workflow</i> Robin Schaefer	87
<i>Practical Solutions to Practical Problems in Developing Argument Mining Systems</i> Debela Gemechu, Ramon Ruiz-Dolz, John Lawrence and Chris Reed	100
<i>Argumentative Analysis of Legal Rulings: A Structured Framework Using Bobbitt’s Typology</i> Carlotta Giacchetta, Raffaella Bernardi, Barbara Montini, Jacopo Staiano and Serena Tomasi	107
<i>Aspect-Based Opinion Summarization with Argumentation Schemes</i> Wendi Zhou, Ameer Saadat-Yazdi and Nadin Kökciyan	116
<i>Investigating Subjective Factors of Argument Strength: Storytelling, Emotions, and Hedging</i> Carlotta Quensel, Neele Falk and Gabriella Lapesa	126
<i>DebArgVis: An Interactive Visualisation Tool for Exploring Argumentative Dynamics in Debate</i> Martin Gruber, Zlata Kikteva, Ignaz Rutter and Annette Hautli-Janisz	140
<i>Automatic Identification and Naming of Overlapping and Topic-specific Argumentation Frames</i> Carolin Schindler, Annalena Aicher, Niklas Rach and Wolfgang Minker	147
<i>A Simple but Effective Context Retrieval for Sequential Sentence Classification in Long Legal Documents</i> Anas Belfathi, Nicolas Hernandez, Monceaux Laura and Richard Dufour	160
<i>Stance-aware Definition Generation for Argumentative Texts</i> Natalia Evgrafova, Loic De Langhe, Els Lefever and Veronique Hoste	168
<i>Reproducing the Argument Quality Prediction of Project Debater</i> Ines Zelch, Matthias Hagen, Benno Stein and Johannes Kiesel	181

<i>Reasoning Under Distress: Mining Claims and Evidence in Mental Health Narratives</i> Jannis Köckritz, Bahar İlgen and Georges Hattab	189
<i>Multi-Class versus Means-End: Assessing Classification Approaches for Argument Patterns</i> Maximilian Heinrich, Khalid Al Khatib and Benno Stein	195
<i>From Debates to Diplomacy: Argument Mining Across Political Registers</i> Maria Poiaganova and Manfred Stede	205
<i>Storytelling in Argumentative Discussions: Exploring the Use of Narratives in ChangeMyView</i> Sara Nabhani, Khalid Al Khatib, Federico Pianzola and Malvina Nissim	217
<i>Segmentation of Argumentative Texts by Key Statements for Argument Mining from the Web</i> Ines Zelch, Matthias Hagen, Benno Stein and Johannes Kiesel	228
<i>Overview of the Critical Questions Generation Shared Task</i> Blanca Calvo Figueras, Rodrigo Agerri, Maite Heredia, Jaione Bengoetxea, Elena Cabrio and Serena Villata	243
<i>StateCloud at Critical Questions Generation: Prompt Engineering for Critical Question Generation</i> Jinghui Zhang, Dongming Yang and Binghuai Lin	258
<i>Tdnguyen at CQs-Gen 2025: Adapt Large Language Models with Multi-Step Reasoning for Critical Questions Generation</i> Tien-Dat Nguyen and Duc-Vu Nguyen	265
<i>Webis at CQs-Gen 2025: Prompting and Reranking for Critical Questions</i> Midhun Kanadan, Johannes Kiesel, Maximilian Heinrich and Benno Stein	281
<i>DayDreamer at CQs-Gen 2025: Generating Critical Questions through Argument Scheme Completion</i> Wendi Zhou, Ameer Saadat-Yazdi and Nadin Kökciyan	289
<i>CUET</i> <i>sR34atatCQs—Gen2025 : CriticalQuestionGenerationviaFew—ShotLLMs—IntegratingNERandArgum</i> Sajib Bhattacharjee, Tabassum Basher Rashfi, Samia Rahman and Hasan Murad	295
<i>ARG2ST at CQs-Gen 2025: Critical Questions Generation through LLMs and Usefulness-based Selec- tion</i> Alan Ramponi, Gaudenzia Genoni and Sara Tonelli	301
<i>CriticalBrew at CQs-Gen 2025: Collaborative Multi-Agent Generation and Evaluation of Critical Que- stions for Arguments</i> Roxanne El Baff, Dominik Opitz and Diaoulé Diallo	314
<i>ELLIS Alicante at CQs-Gen 2025: Winning the critical thinking questions shared task: LLM-based question generation and selection</i> Lucile Favero, Daniel Frases, Juan Antonio Pérez-Ortiz and Tanja Käser	322
<i>Mind</i> <i>MatrixatCQs—Gen2025 : AdaptiveGenerationofCriticalQuestionsforArgumentativeInterventions</i> Sha Newaz Mahmud, Shahriar Hossain, Samia Rahman, Momtazul Arefin Labib and Hasan Mu- rad	332
<i>COGNAC at CQs-Gen 2025: Generating Critical Questions with LLM-Assisted Prompting and Multiple RAG Variants</i> Azwad Anjum Islam, Tisa Islam Erana and Mark A. Finlayson	340

<i>TriLLaMa at CQs-Gen 2025: A Two-Stage LLM-Based System for Critical Question Generation</i>	
Frieso Turkstra, Sara Nabhani and Khalid Al-Khatib	349
<i>Overview of MM-ArgFallacy2025 on Multimodal Argumentative Fallacy Detection and Classification in Political Debates</i>	
Eleonora Mancini, Federico Ruggeri, Serena Villata and Paolo Torroni	358
<i>Argumentative Fallacy Detection in Political Debates</i>	
Eva Cantín Larumbe and Adriana Chust Vendrell	369
<i>Multimodal Argumentative Fallacy Classification in Political Debates</i>	
Warale Avinash Kalyan, Siddharth Pagaria, Chaitra V and Spoorthi H G	374
<i>Prompt-Guided Augmentation and Multi-modal Fusion for Argumentative Fallacy Classification in Political Debates</i>	
Abdullah Tahir, Imaan Ibrar, Huma Ameer, Mehwish Fatima and Seemab Latif	381
<i>Leveraging Context for Multimodal Fallacy Classification in Political Debates</i>	
Alessio Pittiglio	388

Program

Thursday, July 31, 2025

09:00 - 09:15 *Opening Remarks*

09:15 - 10:30 *Session 1*

Stance-aware Definition Generation for Argumentative Texts

Natalia Evgrafova, Loic De Langhe, Els Lefever and Veronique Hoste

Exploring LLM Priming Strategies for Few-Shot Stance Classification

Yamen Ajjour and Henning Wachsmuth

Multi-Agent LLM Debate Unveils the Premise Left Unsaid

Harvey Bonmu Ku, Jeongyeol Shin, Hyoun Jun Lee, Seonok Na and Insu Jeon

From Debates to Diplomacy: Argument Mining Across Political Registers

Maria Poiaganova and Manfred Stede

“The Facts Speak for Themselves”: GPT and Fallacy Classification

Erisa Bytyqi and Annette Hautli-Janisz

10:30 - 11:00 *Coffee Break*

11:00 - 12:00 *Keynote Talk*

12:00 - 12:30 *Session 2*

Aspect-Based Opinion Summarization with Argumentation Schemes

Wendi Zhou, Ameer Saadat-Yazdi and Nadin Kökciyan

Automatic Identification and Naming of Overlapping and Topic-specific Argumentation Frames

Carolin Schindler, Annalena Aicher, Niklas Rach and Wolfgang Minker

12:30 - 14:00 *Lunch Break*

Thursday, July 31, 2025 (continued)

- 14:00 - 14:20 *Critical Questions Generation Shared Task*
- 14:20 - 14:40 *MM-ArgFallacy2025: Multimodal Argumentative Fallacy Detection and Classification on Political Debates*
- 14:40 - 15:30 *Session 3*
- Multi-Class versus Means-End: Assessing Classification Approaches for Argument Patterns*
Maximilian Heinrich, Khalid Al Khatib and Benno Stein
- Toward Reasonable Parrots: Why Large Language Models Should Argue with Us by Design*
Elena Musi, Nadin Kökciyan, Khalid Al Khatib, Davide Ceolin, Emmanuelle Dietz, Klara Maximiliane Gutekunst, Annette Hautli-Janisz, Cristián Santibáñez, Jodi Schneider, Jonas Scholz, Cor Steging, Jacky Visser and Henning Wachsmuth
- DebArgVis: An Interactive Visualisation Tool for Exploring Argumentative Dynamics in Debate*
Martin Gruber, Zlata Kikteva, Ignaz Rutter and Annette Hautli-Janisz
- Reasoning Under Distress: Mining Claims and Evidence in Mental Health Narratives*
Jannis Köckritz, Bahar İlgen and Georges Hattab
- 15:00 - 16:00 *Coffee Break*
- 16:00 - 17:15 *Poster Session (Main Workshop Papers + Shared Task Papers)*
- 17:15 - 18:00 *Panel + Closing Remarks*