Yamen Ajjour

 $\begin{array}{ll} \textit{Birth} & 28.08.1989 \text{ in Krakow} \\ \textit{Mail} & \text{yajjour@hotmail.com} \\ \textit{Languages} & \text{English, German, Arabic} \end{array}$

Nationality German, Syrian Address Hannover, 30173

Web Linkedin Blog Github



EDUCATION

PhD in Computer Science Bauhaus University Weimar Grade: Magna cum Laude Thesis: Addressing Controversial Topics in Search Engines Master of Science in Computer Science and Media Bauhaus University Weimar Grade: 1.44 Thesis: Mining Relevant Arguments at Web Scale Bachelor of Science in Informatics Engineering 2017 - 2023 2017 - 2023

Aleppo University
Grade: 79.45 from 100

Final Project: Developing Web-based Business Process Management System

AWARDS AND SCHOLARSHIPS

Outstanding Reviewer Award at EACL 2023	2023
Best Paper Award at the 42nd German Conference on Artificial Intelligence	2019
DAAD Scholarship for Master Study	2014 - 2016
Türkiye Scholarship for Master Study	2013 - 2014

WORK EXPERIENCE

Postdoctoral Researcher

1.2023 - now

Leibniz University Hannover

- Exploring examples sampling strategies for few-shot stance classification. Fine-tuning Alpaca using LoRa on seven stance classification datasets.
- Building an instruction fine-tuning dataset to analyze the generalizability of instructions fine-tuned model over tasks.
- $\bullet\,$ Using causal knowledge graphs to generate factual text and comparing it to RAG.
- \bullet Teaching NLP programming labs and tutorials. Example algorithms: Byte-pair encoding, SVM, RNNs.
- Co-organizing the ArgMining 2024 workshop and an internal research symposium.

Research Assistant

11.2021 - 12.2022

Leipzig University

• Developing recall-oriented machine learning models to extract arguments from a large web crawl

Research Assistant 10.2019 - 11.2021

Martin Luther Universität Halle-Wittenberg

 \bullet Developing question classifiers using transformers and using them to analyze Yandex! logs.

- Organization of shared tasks: touché, same side stance classification, frame identification
- Developing a stance classifier using BERT and Keras and integrating it in an argument search engine.
- Managing and analyzing high scale textual datasets.
- Supervision of internship projects with industry (e.g., Relaxdays).

Research Assistant

01.2017 - 10.2019

Bauhaus University Weimar

- Developing and maintaining an argument search engine (www.args.me), including developing neural networks and CRF models to mine arguments in natural language.
- Crowd sourcing question datasets on Amazon Mechanical Turk and Toloka.
- Supervision of labs, projects, seminars, and theses.

Student Assistant

04.2015 - 12.2016

Bauhaus University Weimar

- Developing a search engine for Wikipedia.
- Developing a crowd sourcing interface for offensive language detection.

C++ Developer

11.2012 - 09.2013

IDscan Limited LTD

- Developing algorithms in OpenCV to detect blurry images.
- Developing computer vision algorithms to recognize personal documents in photos using OpenCV.
- Creating wrappers for C++ libraries in C#, Java, and Python.

Odoo ERP Developer

08.2011 - 08.2012

Taiba Soft

- Customizing and maintaining an ERP System for a hospital based on OpenERP.
- Customizing a PyQt-based client for the ERP System.

SKILLS

Programming Languages	Python, C++, Java, Bash, SQL, \LaTeX
Libraries	PyTorch, Pandas, sickit-learn, NumPy, vLLM, Hugging Face, SciPy, Matplotlib, Spacy, Lucene, Outlines, Optuna, Accelerate, LangChain
Software	Github, Gitlab, Docker, PySpark, Hadoop, Amazon Mechnical Turk, AWS, SLURM

TALKS

Argumentation Technology SCADS AI Summer School

2022

Instructions Fine-tuning with Alpaca

2024

PyData Meetup

PUBLICATIONS

- [1] Yamen Ajjour, Henning Wachsmuth, Dora Kiesel, Patrick Riehmann, Fan Fan, Giuliano Castiglia, Rosemary Adejoh, Bernd Froehlich, and Benno Stein. Visualization of the topic space of argument search results in args.me. In *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing (EMNLP 2018) System Demonstrations*. Association for Computational Linguistics, November 2018.
- [2] Dora Kiesel, Patrick Riehmann, Fan Fan, Yamen Ajjour, Henning Wachsmuth, Benno Stein, and Bernd Froehlich. Improving barycentric embeddings of topics spaces. In *Proceedings VIS 2018*. IEEE, November 2018.
- [3] Henning Wachsmuth, Martin Potthast, Khalid Al-Khatib, Yamen Ajjour, Jana Puschmann, Jiani Qu, Jonas Dorsch, Viorel Morari, Janek Bevendorff, and Benno Stein. Building an Argument Search Engine for the Web. In *Proceedings of the Fourth Workshop on Argument Mining (ArgMining 2017)*, pages 49–59, September 2017.
- [4] Yamen Ajjour, Wei-Fan Chen, Johannes Kiesel, Henning Wachsmuth, and Benno Stein. Unit Segmentation of Argumentative Texts. In *Proceedings of the Fourth Workshop on Argument Mining (ArgMining 2017)*, pages 118–128, September 2017.
- [5] Henning Wachsmuth, Benno Stein, and Yamen Ajjour. "PageRank" for Argument Relevance. In Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2017), pages 1116–1126, April 2017.
- [6] Yamen Ajjour, Milad Alshomary, Henning Wachsmuth, and Benno Stein. Modeling Frames in Argumentation. In 2019 Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing (EMNLP 2019). ACL, November 2019.
- [7] Yamen Ajjour, Henning Wachsmuth, Johannes Kiesel, Martin Potthast, Matthias Hagen, and Benno Stein. Data Acquisition for Argument Search: The args.me corpus. In 42nd German Conference on Artifical Intelligence (KI 2019). Springer, September 2019.
- [8] Jan Heinrich Reimer, Thi Kim Hanh Luu, Max Henze, and Yamen Ajjour. Modern Talking in Key Point Analysis: Key Point Matching using Pretrained Encoders. In 8th Workshop on Argument Mining (ArgMining 2021) at EMNLP. Association for Computational Linguistics, November 2021.
- [9] Alexander Bondarenko, Yamen Ajjour, Valentin Dittmar, Niklas Homann, Pavel Braslavski, and Matthias Hagen. Towards Understanding and Answering Comparative Questions. In 15th ACM International Conference on Web Search and Data Mining (WSDM 2022). ACM, February 2022.
- [10] Yamen Ajjour, Pavel Braslavski, Alexander Bondarenko, and Benno Stein. Identifying Argumentative Questions in Web Search Logs. In 45th International ACM Conference on Research and Development in Information Retrieval (SIGIR 2022). ACM, July 2022.
- [11] Yamen Ajjour, Johannes Kiesel, Benno Stein, and Martin Potthast. Topic Ontologies for Arguments. In 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2023). Association for Computational Linguistics, May 2023.
- [12] Yamen Ajjour. Addressing Controversial Topics in Search Engines. PhD thesis, Bauhaus University, Weimar, Germany, 2023.
- [13] Yamen Ajjour and Henning Wachsmuth. Exploring Priming Strategies for Few Shot Stance Classification. In *ArgMining 2025*, *ACL 2025*. Association for Computational Linguistics, 2025.

SUPERVISION AND TEACHING

Projects		
Adressvalidierung und Korrektur	2020	
The Argument Search Engine	SS2018	
Interactive Argument Search	WS2018	
Argument Search Engine - Voice-based Argument Search	WS2019	
Mining Arguments in Parliamentary Debates	SS2019	
Bachelor Theses		
Integrating Counterarguments into args.me	2019	
Conversational Information Retrieval for Instructional Content	2018	
Measuring and Modeling Bias in Search Engines	2020	
Generating Factual Arguments by Fine-Tuning LLMs on Causal Knowledge Gra	aphs 2024	
Master Theses		
Mining Arguments from Experts	2020	
Analyzing the Impact of Context on Downstream Argument Assessment Tasks	2023	
Personalized Label Explanation Generation	2024	
Labs		
Computational Reasoning WS2017, SS2020, SS202	3, SS2024	
Web Technologien SS201	SS2017, SS2018	
Introduction to Machine Learning	WS2019	
Web Suche und Information Retrieval WS2020	WS2020, WS2021	
Natural Language Processing SS2020, SS2021	SS2020, SS2021, WS2024	
Language Technologies	WS2023	

REVIEWING

AAAI, ACL, EMNLP, COLING, EACL, NAACL, CIKIM, ArgMining, COMMA

CHAIR

ArgMining 2024, ARR 2025, EMNLP Demo Track 2025