# Katerina Margatina

Ph.D. Student in Natural Language Processing

https://katerinamargatina.github.io k.margatina@sheffield.ac.uk in LinkedIn SGoogle Scholar Semantic Scholar Twitter **Github** 

# **Research Interests**

active learning, large language models, dynamic adversarial data collection, evaluation & benchmarking, language modeling, robustness, fairness, temporal drift, disagreement, cross-cultural natural language processing

Education	
Oct. 2019 – Ongoing	University of Sheffield, UK
	Ph.D. in Computer Science
	Natural Language Processing Group (SheffieldNLP)
	Supervisors: Prof. Nikolaos Aletras
	Funding: Amazon Alexa Fellowship
	Thesis: "Active Learning Algorithms for Data Efficient Language Models"
	Expected Graduation: August 2023
Jan. 2016 – Jul. 2016	Universidad Carlos III de Madrid, Spain
	MEng in Computer Engineering (Erasmus Mobility in Masters)
Sep. 2012 – Jul. 2019	National Technical University of Athens, Greece
	BEng & MEng in Electrical and Computer Engineering
	• GPA: 8.06/10 (top 15%)
	Major: Electronics and Systems
	• Thesis: "Transfer Learning and Attention-based Conditioning Methods for Natural Lan-
	guage Processing" - supervised by Prof. Alexandros Potamianos

# **Professional Experience**

Aug. 2022 – Mar.	Meta, UK Research Scientist Intern at Meta AI Research (FAIR Labs) in London
	• Active Learning Principles for In-Context Learning with Large Language Models (paper under review)
Apr. 2022 – Aug.	Amazon Web Services, USA
2022	Applied Scientist Intern at Amazon Comprehend in NYC
	• Dynamic Benchmarking of Masked Language Models on Temporal Concept Drift with Multiple Views (paper published in EACL 2023)
Jun. 2021 – Feb.	University of Copenhagen, Denmark
2022	Research Intern / Visiting Ph.D. in Computer Science at CoAStaL
Feb. 2020 - Jun.	University of Sheffield, UK
2021	Teaching Assistant at the Department of Computer Science
	COM4513/6513 Natural Language Processing (2020 & 2021)
	• COM3110/4115 Text Processing (2020)
Nov. 2018 - Jul. 2019	DeepSea Technologies, Piraeus, Greece
	Machine Learning Engineer at the AI team

# **Teaching & Other Academic Experience**

2022 -

#### **Workshop Co-Organiser**

Ongoing

• DADC: The First Workshop on Dynamic Adversarial Data Collection at NAACL 2022 (website)

2021

# MSc. Dissertation Co-Supervisor

- Co-advised Ard Snijders, a MSc student from the University of Amsterdam, along with Douwe Kiela on the thesis project *Investigating Multi-source Active Learning for Natural Language Inference* (published in EACL 2023).
- Co-advised Atsuki Yamaguchi, a MSc student from the University of Sheffield, along with George Chrysostomou and Nikolaos Aletras on the project *Frustratingly Simple Alternatives to Masked Language Modeling* (published in EMNLP 2021).

2019 -Ongoing

# **Teaching Assistant**

- Assisted students during the lab sessions of the Text Processing and Natural Language Processing modules.
- Marked lab reports following a pre-determined scheme set by the Course Leader.
- Experience in face-to-face teaching with students that needed extra guidance.

2018 -Ongoing

# **Program Committee/Reviewer**

• ACL, EMNLP, NAACL, EACL, AACL, WASSA, NLLP, DADC

#### **Invited Talks & Presentations**

Jun. 2022 | Bloomberg, AI Group / in-person in NYC

Apr. 2022 | NLPhD Speaker Series, University of Saarland (slides) / remote

# **Honors & Awards**

Dynabench: Awarded a research grant of \$46,825 from Meta for our proposal: "Adversarial NERDs: Optimising feedback between humans-and-model-in-the-loop" (with Hannah Rose Kirk and Dr. Scott Hale).

EMNLP: Awarded a scholarship to participate to the virtual Conference on Empirical Methods in Natural Language Processing (EMNLP 2020).

MLSS: Selected to participate to the highly competitive Machine Learning Summer School (MLSS) organized by the Max Planck Institute for Intelligent Systems (180 out of 1300+ applications were accepted).

Amazon Alexa Fellowship: Awarded an Amazon Alexa Fellowship for a 3-year Ph.D. program at the University of Sheffield under the supervision of Dr. Nikolaos Aletras.

**EETN Scholarship Award**: Awarded a scholarship of from the Hellenic Artificial Intelligence Society (EETN) to attend the first Athens Natural Language Processing Summer School (AthNLP).

**ACM-W Scholarship Award**: Awarded an ACM-W scholarship of \$600 to attend the Annual Meeting of the Association for Computational Linguistics in Florence (ACL 2019).

WASSA IEST: Ranked 3<sup>rd</sup> out of 30 participants at the WASSA 2018 Implicit Emotion Shared Task (IEST) conducted by the EMNLP 2018 Conference.

#### **Publications**

2023

- 1. **Margatina**, K. & Aletras, N. On the Limitations of Simulating Active Learning in Findings of ACL (2023).
- 2. **Margatina**, **K.**, Schick, T., Aletras, N. & Dwivedi-Yu, J. Active Learning Principles for In-Context Learning with Large Language Models. *Arxiv* (2023).
- 3. **Margatina**, **K.** et al. Dynamic Benchmarking of Masked Language Models on Temporal Concept Drift with Multiple Views in EACL (2023).
- 4. Snijders, A., Kiela, D. & **Margatina**, K. *Investigating Multi-source Active Learning for Natural Language Inference* in *EACL* (2023).

2022

- 5. Hershcovich, D. et al. Challenges and Strategies in Cross-Cultural NLP in ACL (2022).
- 6. **Margatina, K.**, Barrault, L. & Aletras, N. On the Importance of Effectively Adapting Pretrained Language Models for Active Learning in ACL (2022).

2021

- 7. **Margatina**, **K.**, Vernikos, G., Barrault, L. & Aletras, N. *Active Learning by Acquiring Contrastive Examples* in *EMNLP* (2021).
- 8. Yamaguchi, A., Chrysostomou, G., **Margatina, K.** & Aletras, N. Frustratingly Simple Alternatives to Masked Language Modeling in EMNLP (2021).
- 2020
- 9. Vernikos, G., **Margatina**, K., Chronopoulou, A. & Androutsopoulos, I. *Domain Adversarial Fine-Tuning as an Effective Regularizer* in *Findings of EMNLP* (2020).

2019

- 10. **Margatina, K.** Transfer Learning and Attention-based Conditioning Methods for Natural Language Processing. Thesis, NTUA (2019).
- 11. **Margatina**, K., Baziotis, C. & Potamianos, A. Attention-based Conditioning Methods for External Knowledge Integration in ACL (2019).

2018

12. Chronopoulou\*, A., Margatina\*, K., Baziotis, C. & Potamianos, A. NTUA-SLP at IEST 2018: Ensemble of Neural Transfer Methods for Implicit Emotion Classification in Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (2018).

#### **Coding**

**Expert**: Python, Bash / PyTorch, HuggingFace transformers Familiar with: C, C++, Matlab, SQL, Java / Tensorflow, Keras

Other: Git, Flask, Unix, Flask, AWS

#### Languages

Greek (Native), English (C2), Spanish (B2), French (B1)

#### **Personal Interests**

Tennis, Yoga, Bouldering, Hiking, Skiing, Sailing (diploma)