

Alexandra Chronopoulou

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Research Interests

LLM instruction following and evaluation, parameter-efficient fine-tuning, domain adaptation, machine translation & multilingual natural language processing

Employment

Google DeepMind <i>Research Scientist</i> Gemini post-training	New York, NY, USA 01/2024-present
Google DeepMind <i>Research Scientist Intern</i> Supervisors: Sebastian Ruder, Priyanka Agrawal	Berlin, Germany 04/2023-07/2023
Amazon AWS <i>Applied Scientist Intern</i> Supervisors: Prashant Mathur, Brian Thompson, Marcello Federico	Santa Clara, CA, USA 08/2022-12/2022
Allen Institute for Artificial Intelligence (AI2) <i>Research Scientist Intern</i> Supervisors: Jesse Dodge, Matthew E. Peters	Seattle, WA, USA (remote) 05/2022-08/2022
Allen Institute for Artificial Intelligence (AI2) <i>Research Scientist Intern</i> Supervisors: Jesse Dodge, Matthew E. Peters	Seattle, WA, USA (remote) 07/2021-01/2022
Behavioral Signal Technologies Inc. <i>Machine Learning Engineer</i>	Los Angeles, CA, USA (remote) 11/2018-07/2019
NOKIA <i>Software Engineer Intern</i>	Athens, Greece 07/2017-01/2018

Education

Ludwig Maximilian University of Munich <i>PhD in Computer Science</i> ○ Supervisor: Alexander Fraser ○ Thesis: "Efficient Multilingual and Domain Adaptation of Language Models under Resource Constraints"	Munich, Germany 09/2019-10/2024
National Technical University of Athens <i>Diploma (BEng & MEng) in Electrical and Computer Engineering</i> ○ GPA : 8.0/10 (top 15%) ○ Thesis: "Transfer Learning with Deep Neural Networks for Sentiment Analysis and Semantic Modeling" ○ Thesis Supervisor: Alexandros Potamianos	Athens, Greece 09/2012-02/2019

Publications

1. [What Matters for Model Merging at Scale?](#)
Yadav, P., Vu, T., Lai, J., **Chronopoulou, A.**, Faruqui, M., Bansal, M., Munkhdalai, T.
arXiv 2024
2. [Gemini 1.5: Unlocking multimodal understanding across millions of tokens of context](#)
Reid, M., ..., **Chronopoulou, A.**, et al. (Gemini Team Google)

arXiv 2024

3. [Language and Task Arithmetic with Parameter-Efficient Layers for Zero-Shot Summarization](#)
Chronopoulou, A., Pfeiffer, J., Maynez, J., Wang, X., Ruder, S., Agrawal, P.
Workshop on Multilingual Representation Learning@EMNLP 2024 **Best Paper Award**
4. [Findings of the IWSLT 2023 Evaluation Campaign](#)
Agarwal, M., ..., **Chronopoulou, A.**, et al. (50+ authors)
IWSLT 2023
5. [On the Copying Problem of Unsupervised NMT: A Training Schedule with a Language Discriminator Loss](#)
Liu, Y., **Chronopoulou, A.**, Schütze, H., Fraser, A.
IWSLT 2023
6. [Mitigating Data Imbalance and Representation Degeneration in Multilingual Machine Translation](#)
Lai, W., **Chronopoulou, A.**, Fraser, A.
EMNLP 2023 Findings
7. [Improving Isochronous Machine Translation with Target Factors and Auxiliary Counters](#)
Pal, P., Thompson, B., Virkar, Y., Mathur, P., **Chronopoulou, A.**, Federico, M.
INTERSPEECH 2023
8. [Jointly Optimizing Translations and Speech Timing to Improve Isochrony in Automatic Dubbing](#)
Chronopoulou, A., Thompson, B., Mathur, P., Virkar, Y., Lakew, S. M., Federico, M.
arXiv 2023
9. [AdapterSoup: Weight Averaging to Improve Generalization of Pretrained Language Models](#)
Chronopoulou, A., Peters, M., Fraser, A., Dodge, J.
EACL 2023 Findings
10. [Language-Family Adapters for Low-Resource Multilingual Neural Machine Translation](#)
Chronopoulou, A., Stojanovski, D., Fraser, A.
Workshop on Technologies for Machine Translation of Low-Resource Languages@EACL 2023
11. [\$m^4\$ Adapter: Multilingual Multi-Domain Adaptation for Machine Translation with a Meta-Adapter](#)
Lai, W., **Chronopoulou, A.**, Fraser, A.
EMNLP 2022 Findings
12. [Efficient Hierarchical Domain Adaptation for Pretrained Language Models](#)
Chronopoulou, A., Peters, M., Dodge, J.
NAACL 2022
13. [Improving the Lexical Ability of Pretrained Language Models for Unsupervised Neural Machine Translation](#)
Chronopoulou, A., Stojanovski, D., Fraser, A.
NAACL 2021
14. [Reusing a Pretrained Language Model on Languages with Limited Corpora for Unsupervised Neural Machine Translation](#)
Chronopoulou, A., Stojanovski, D., Fraser, A.
EMNLP 2020
15. [Domain Adversarial Fine-Tuning as an Effective Regularizer](#)
Vernikos, G., Margatina, K., **Chronopoulou, A.**, Androutsopoulos, I.
EMNLP 2020 Findings
16. [The LMU Munich System for the WMT 2020 Unsupervised Machine Translation Shared Task](#)
Chronopoulou, A., Stojanovski, D., Hangya, V., Fraser, A.
WMT 2020

17. [An Embarrassingly Simple Approach for Transfer Learning from Pretrained Language Models.](#)
Chronopoulou, A., Baziotis, C., Potamianos, A.
NAACL 2019
18. [NTUA-SLP at IEST 2018: Ensemble of Neural Transfer Methods for Implicit Emotion Classification](#)
Chronopoulou, A.*, Margatina, K.*, Baziotis, C., Potamianos, A.
Workshop on Computational Approaches to Subjectivity, Sentiment & Social Media Analysis@EMNLP 2018.
19. [NTUA-SLP at SemEval-2018 Task 1: Predicting Affective Content in Tweets with Deep Attentive RNNs and Transfer Learning](#)
Baziotis, C., Athanasiou, N., **Chronopoulou, A.**, Kolovou, A., Paraskevopoulos, G., Ellinas, N., Narayanan, S., Potamianos, A.
International Workshop on Semantic Evaluation@NAACL 2018

Teaching

Supervision of BA/MA theses at LMU Munich (2019-2023)

Tutor on courses: Information Extraction, Machine Translation at LMU Munich (2019-2023)

Academic Service

- **Area Chair**
ACL Rolling Review (2024-)
- **Program Committee / Reviewer**
ACL, EMNLP, NAACL, EACL, WMT, IWSLT, Repl4NLP (2018-present)

Invited Talks

Lilt AI: Efficient hierarchical domain adaptation of pretrained language models ([slides](#)) *Sep 2022*

ELRC Workshop on LLMs: Language-family adapters for multilingual machine translation ([slides](#)) *Jun 2022*

Honors & Awards

- **Competitions**
Ranked 1st in [WMT 2020 Unsupervised Task](#). The task was translation for German-Sorbian in both directions.
Ranked 1st at the [SemEval 2018 Task1E: Affect in Tweets](#).
- **Awards**
Travel grant from Facebook to attend inaugural EurNLP 2019 summit in London, UK.
Awarded a scholarship from the [Hellenic Artificial Intelligence Society](#) to attend [AthNLP 2019](#) in Athens, Greece.
Awarded an [ACM-W scholarship](#) to attend [NAACL 2019](#) in Minneapolis, MN.
Erasmus Exchange Student Program (01/2016/-06/2016) to visit UPC in Barcelona, Spain.

Programming Skills

Languages: Python, Bash (excellent) / C, C++, Matlab, SQL, Java (familiar with)

ML & NLP frameworks: PyTorch, Jax, Fairseq, HuggingFace, Tensorflow

Languages

Greek (*Native*), English (*C2*), French (*C2*), Spanish (*B2*), German (*B1*), Italian (*A2*)