

Christos Baziotis

CONTACT INFORMATION

 [cbaziotis.github.io](https://github.com/cbaziotis)  github.com/cbaziotis  christos.baziotis@gmail.com
 London, UK  [papers \(Google Scholar\)](https://paperswithcode.com/cbaziotis)  linkedin.com/christosbaziotis

RESEARCH INTERESTS

My research focuses on the intersection of Machine Learning and Natural Language Processing. I am interested text generation, multilinguality, and enabling models to learn with limited supervision by leveraging prior knowledge from unlabeled data.

EDUCATION

PhD Candidate 2019 - 2023 (*expected*)

University of Edinburgh (ILCC), UK

Supervisors: [Barry Haddow](#), [Alexandra Birch](#)

- My PhD topic is low-resource machine translation (MT). I have worked on semi-supervised and multilingual MT, improving parameter efficiency, scaling, and (non-parametric) retrieval.

MSc in Advanced Computing and Informatics Systems

2017

University of Piraeus, Greece (GPA 9.46/10)

- I worked on sentiment analysis & designed a model that ranked *1st* at Semeval 2017 Task4.

BSc in Computer Science

2014

University of Piraeus, Greece

WORK EXPERIENCE

External Research Collaborator

Jan 2022 - Apr 2022

[Meta AI](#) (FAIR) at Menlo Park, CA, USA (remote)

- I resumed and concluded my internship project that was accepted to EMNLP 2022 (oral).

Research Scientist Intern

Sep 2021 - Dec 2021

[Meta AI](#) (FAIR) at Menlo Park, CA, USA (remote)

- I solved an optimization obstacle that enabled to effectively scale hyper-networks and use them to improve parameter efficiency (up to 12x) and performance in multilingual MT.

Applied Scientist Intern

May 2021 - Aug 2021

[Amazon Research](#) at Palo Alto, CA, USA (remote)

- I analyzed how models translate figurative language and proposed LitTER, the first automatic metric for measuring literal translation errors (accepted at EACL 2023).

Software Engineer

Apr 2014 - Jan 2016

[Profile Systems and Software S.A.](#), Athens, Greece

- Profile develops software for the Banking, FinTech & Investment Management industries.
- I developed [Axia](#), Profile's cloud-based solution for wealth management.

SELECTED PUBLICATIONS

(see full list in [Google Scholar](#))

Christos Baziotis, Biao Zhang, Alexandra Birch, Barry Haddow. "When Does Monolingual Data Help Multilingual Translation: The Role of Domain and Model Scale". Preprint 2023. [\[paper\]](#)

Christos Baziotis, Prashant Mathur, Eva Hasler. "Automatic Evaluation and Analysis of Idioms in Neural Machine Translation". EACL 2023 (**oral**). [\[paper\]](#) [\[code\]](#)

Christos Baziotis, Mikel Artetxe, James Cross, Shruti Bhosale. "Multilingual Machine Translation with Hyper-Adapters". EMNLP 2022 (**oral**). [\[paper\]](#) [\[code\]](#)

Christos Baziotis, Ivan Titov, Alexandra Birch, Barry Haddow. "Exploring Unsupervised Pretraining Objectives for Machine Translation". ACL 2021 (Findings). [\[paper\]](#) [\[code\]](#)

Christos Baziotis, Barry Haddow, Alexandra Birch. "Language Model Prior for Low-Resource Neural Machine Translation". EMNLP 2020 (**oral** - remote). [\[paper\]](#) [\[code\]](#)

Christos Baziotis, Ion Androutsopoulos, Ioannis Konstas, Alexandros Potamianos. “SEQ³: Differentiable Sequence-to-Sequence-to-Sequence Autoencoder for Unsupervised Abstractive Sentence Compression”. NAACL 2019 (oral). [\[paper\]](#) [\[code\]](#)

Alexandra Chronopoulou, **Christos Baziotis**, Alexandros Potamianos. “An Embarrassingly Simple Approach for Transfer Learning from Pretrained Language Models”. NAACL 2019 (oral). [\[paper\]](#) [\[code\]](#)

Katerina Margatina, **Christos Baziotis**, Alexandros Potamianos. “Attention-based Conditioning Methods for External Knowledge Integration”. ACL 2019. [\[paper\]](#) [\[code\]](#)

Christos Baziotis, Nikos Athanasiou, Alexandra Chronopoulou, Athanasia Kolovou, Georgios Paraskevopoulos, Nikolaos Ellinas, Shrikanth Narayanan, Alexandros Potamianos. “NTUA-SLP at SemEval-2018 Task 1: Predicting Affective Content in Tweets with Deep Attentive RNNs and Transfer Learning”. SemEval 2018 — **1st place at Task1E**. [\[paper\]](#) [\[code\]](#)

Christos Baziotis, Nikos Pelekis, Christos Doukeridis. “DataStories at SemEval-2017 Task 4: Deep LSTM with Attention for Message-level and Topic-based Sentiment Analysis”. SemEval 2017 — **1st place at Task4A**. [\[paper\]](#) [\[code\]](#)

RESEARCH EXPERIENCE

Teacher Assistant Jan 2022 - May 2022
University of Edinburgh (ILCC), UK
· I designed and organized the labs, tutorials, and assignments for the M.Sc. course “Natural Language Understanding, Generation, and Machine Translation”.

Research Assistant 2017 - 2019
National Technical University of Athens (NTUA), Greece
· I did research in text generation and transfer learning that led to several publications
· I worked as Teacher Assistant in Speech and Language Processing course
· I was the leader of the NTUA-SLP Team for SemEval 2018, and we achieved top-scoring results at Tasks 1, 2, 3

Research Assistant 2017 - 2019
Institute of Communication and Computer Systems (ICCS), Athens, Greece
I worked at the project “**BabyRobot**: Child-Robot Communication and Collaboration”:
· Object Recognition, for enabling the robots to identify children’s workspace.
· Speech Emotion Recognition, for tracking children’s emotions.
· Text Affect Recognition, for monitoring children’s affective state (ASR transcripts).

COMPETITIONS

· 1st place in Semeval 2017, Task4A “Sentiment Analysis in Twitter”
· 1st place in Semeval 2018, Task1E “Affect in Tweets”
· 1st place in BioCreative VI Precision Medicine Track, “Document Triage Task”
· 2nd place in Semeval 2017 Task4 [B, C, D] (*Sentiment Analysis*), Semeval 2017 Task6A (*Humor*), Semeval 2018 Task2 (*Emoji Prediction*), Semeval 2018 Task3 (*Irony Detection*)

ENGINEERING SKILLS

I have experience with training large models in distributed infrastructures (e.g., SLURM).
· I am proficient in PyTorch and NLP frameworks, such as fairseq, as well as the “classical” Python machine learning stack (NumPy/SciPy, scikit-learn, etc.).
· I am familiar with the JavaScript front-end stack (e.g., node, AngularJS / VueJS, HTML5, CSS) for creating web-based applications and relational databases (SQL).

OPEN-SOURCE PROJECTS

ekphrasis (600+ stars in GitHub)
Text processing tool, targeted at social media texts (e.g. Twitter)
NeAt-Vision (240+ stars in GitHub)
Visualization of the behaviour of NLP deep-learning models (attention, predictions, etc.)