Christos Baziotis

Location: Edinburgh, UK **Publications:** Google Scholar CONTACT christos.baziotis@gmail.com cbaziotis.github.io **Email:** Website: INFORMATION

Natural Language Generation, Machine Translation & Multilingual NLP, Unsupervised & RESEARCH **INTERESTS** Low-Resource Learning, Transfer Learning, Exploiting Prior Knowledge

EDUCATION Ph.D. Candidate 2019 - Present

> University of Edinburgh (ILCC), UK Topic: Low-Resource Machine Translation

Supervisors: Dr. Barry Haddow, Dr. Alexandra Birch

M.Sc. in Advanced Computing and Informatics Systems 2017

2014

Sep 2021 - Dec 2021

University of Piraeus, Greece, Department of Informatics (GPA 9.46/10)

Thesis: "Sentiment Analysis in Twitter with Deep Neural Networks" Supervisors: Prof. Nikos Pelekis, Prof. Christos Doulkeridis

- Top scoring system in Semeval 2017, Task4A "Sentiment Analysis in Twitter"

B.Sc. in Computer Science

University of Piraeus, Greece, Department of Informatics

WORK **External Research Collaborator** Jan 2022 - Apr 2022 **EXPERIENCE** Meta AI (FAIR) at Menlo Park, CA, USA (remote)

I resumed and concluded my internship research project (accepted to EMNLP 2022).

Research Scientist Intern

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

I worked on parameter-efficient multilingual machine translation, with Shruti Bhosale, Mikel Artetxe, and James Cross.

Applied Scientist Intern May 2021 - Aug 2021

Amazon Research at Palo Alto, CA, USA (remote)

I worked on the translation of figurative language with Prashant Mathur and Eva Hasler.

2014 - 2016 **Software Engineer**

Profile Systems and Software S.A. - Banking & Investment Management - Web software engineer (lead front-end), at Profile's R&D department.

- I developed Axia, Profile's cloud-based solution for wealth management.

SELECTED Christos Baziotis, Prashant Mathur, and Eva Hasler. "Automatic Evaluation and Analysis of Idioms in Neural Machine Translation". Under Review. [paper] [code] **PUBLICATIONS**

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

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

> Christos Baziotis, Barry Haddow, and Alexandra Birch. "Language Model Prior for Low-Resource Neural Machine Translation". EMNLP 2020. [paper] [code]

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

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

Katerina Margatina, **Christos Baziotis**, and 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, and Alexandros Potamianos. "NTUA-SLP at SemEval-2018 Task 1: Predicting Affective Content in Tweets with Deep Attentive RNNs and Transfer Learning". SemEval (NAACL) 2018 — 1st place at Task1E. [paper] [code]

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

RESEARCH EXPERIENCE

Teacher Assistant

Jan 2022 - May 2022

University of Edinburgh (ILCC), UK

Course (M.Sc.): "Natural Language Understanding, Generation, and Machine Translation - Designed and organized the labs, tutorials, and assignments

Research Assistant 2017 - 2019

National Technical University of Athens (NTUA), Greece

Research Topic: Low-Resource Neural Text Generation, Transfer Learning Supervisors: Prof. Alexandros Potamianos, Prof. Ion Androutsopoulos

- Teacher Assistant in Speech and Language Processing
- Leader of NTUA-SLP Team for SemEval 2018 in Tasks 1, 2, 3 (1st in Task1E)

Research Assistant 2017 - 2019

Institute of Communication and Computer Systems (ICCS), Athens, Greece

Project: "BabyRobot: Child-Robot Communication and Collaboration" (EU Horizon 2020)

- 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"
- 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)

OPEN-SOURCE PROJECTS

ekphrasis (Text Preprocessing)

Text processing tool, targeted at messages from social networks (e.g. Twitter)

NeAt-Vision (Visualization / Model Analysis)

Visualization of the behaviour of deep-learning models for NLP (attention, predictions)

PROGRAMMING SKILLS

Proficient: Python (machine learning stack; PyTorch, NumPy/SciPy, scikit-learn, Keras),

JavaScript (front-end stack; AnglularJS, VueJS) **Familiar**: Java, C/C++, SQL, RegEx, Linux Shell

LANGUAGES Greek (native), English (fluent)