I am a PhD student in Natural Language Processing, with particular interests in multilingual NLP, and parameter-efficient and modular transfer learning.

EDUCATION

University of Cambridge, United Kingdom

PhD candidate, Natural Language Processing, Oct. 2020 - Jun. 2024 (expected).

- Advisors: Anna Korhonen, Ivan Vulić, Edoardo M. Ponti.
- Funded by the Harding Distinguished Postgraduate Scholarship.

University of Waikato, New Zealand

MSc, Computer Science (Research) (Hons, 1st class) in NLP, March 2019 - March 2020.

- Thesis: Contextualised Approaches to Embedding Word Senses (A+).
- Advisors: Bernhard Pfahringer, Felipe Bravo-Marquez.
- Funded by the University of Waikato Research Masters Scholarship.

University of Auckland, New Zealand

BA/BE(Hons, 1st class) conjoint, Feb. 2014 - Nov. 2018. GPA: 8.8/9.0.

- BA major: Logic and Computation.
- BE specialisation: Engineering Science.
- Honours project: "Short-Term Modelling of Electricity Prices in New Zealand."
- Funded by the University of Auckland Scholarship.

SELECTED PUBLICATIONS

Alan Ansell, Ivan Vulić, Hannah Sterz, Anna Korhonen and Edoardo M. Ponti. Scaling Sparse Fine-Tuning to Large Language Models. Jan 2024.

Alan Ansell*, Marinela Parović*, Ivan Vulić, Anna Korhonen and Edoardo M. Ponti. Unifying Cross-Lingual Transfer across Scenarios of Resource Scarcity. In Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023), Dec 2023. * = equal contribution.

Alan Ansell, Edoardo M. Ponti, Anna Korhonen and Ivan Vulić. Distilling Efficient Language-Specific Models for Cross-Lingual Transfer. In Findings of the 61st Annual Meeting of the Association for Computational Linguistics (ACL 2023), July 2023.

Marinela Parović, Alan Ansell, Ivan Vulić and Anna Korhonen. Cross-Lingual Transfer with Target Language-Ready Task Adapters. In Findings of the 61st Annual Meeting of the Association for Computational Linguistics (ACL 2023), July 2023.

Alan Ansell, Edoardo M. Ponti, Anna Korhonen and Ivan Vulić. Composable Sparse Fine-Tuning for Cross-Lingual Transfer. In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), May 2022.

Alan Ansell, Edoardo M. Ponti, Jonas Pfeiffer, Sebastian Ruder, Goran Glavaš, Ivan Vulić, and Anna Korhonen. MAD-G: Multilingual Adapter Generation for Efficient Cross-Lingual Transfer. In Findings of the 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021), Nov 2021.

Alan Ansell, Felipe Bravo-Marquez and Bernhard Pfahringer. PolyLM: Learning about Polysemy through Language Modeling. In Proceedings of the 16th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2021), April 2021.

Work and Research Microsoft Research, Montreal, Jun. - Aug. 2024

Research Intern

EXPERIENCE Researching modular fine-tuning of large language models with Alessandro Sordoni and Lucas Cac-

cia

Google, Sydney, Nov. 2018 - Feb. 2019

Software Engineering Intern

Built a data propagation system for regional autoscaling at Google.

University of Auckland, Department of Engineering Science, Nov. 2017 - Feb. 2018

Research Assistant Advisor: Golbon Zakeri

Modelling of demand and prices in the New Zealand Electricity Market (NZEM).

Google, Sydney, Nov. 2016 - Feb. 2017

Software Engineering Intern

Built from scratch a machine learning pipeline for "drain prediction", which detects when traffic should be drained from Google's Blobstore service.

New Zealand Olympiad in Informatics (NZOI), 2015-2018

Volunteer tutor

NZOI select and train the New Zealand team for the International Olympiad in Informatics. Tutor at the NZOI Summer Camps in 2015 and 2018, Deputy Training Director 2018.

AWARDS AND ACHIEVEMENTS

International Olympiad in Informatics (IOI)

Bronze medallist 2014, NZ representative team member 2012-2014.

CodeCup

CodeCup is an international Artificial Intelligence game programming competition. **3rd place** (2018), 5th place (2016), 9th place (2015), 8th place (2014).

University of Auckland

- Senior Scholar Award in the Faculty of Engineering (top of graduating class), 2018.
- Senior Scholar Award in the Faculty of Arts, 2018.
- 10 First in Course awards, 2015-2018: statistics (3), operations research (4), linguistics (3).
- Faculty of Engineering Dean's Honours List, 2014-2017.

ACM - International Collegiate Programming Contest

Member of University of Auckland representative team at the 2015 South Pacific Regional Finals. Top placed New Zealand team and **3rd placed** overall.

International Chess Federation (FIDE)

FIDE Master (FM), awarded 2017.

SKILLS

Programming languages: Python, C++, Java, Bash.

Relevant technologies: PyTorch, TensorFlow.