

# Verna Dankers

EMAIL: [vernadankers@gmail.com](mailto:vernadankers@gmail.com)

BORN: October 13, 1996 – Pijnacker, Netherlands

NATIONALITY: Dutch

## Education

- 2020-2024 **PhD at the UKRI Centre for Doctoral Training in Natural Language Processing**,  
University of Edinburgh, Scotland
- *Supervisors*: Dr Ivan Titov, Dr Christopher Lucas
  - *Research focus*: interpretability analyses for compositional generalisation in NLP.
  - The CDT in NLP offers a four-year programme with integrated training for PhD candidates. Given my background in Artificial Intelligence, I am using this opportunity to educate myself on the topics of human language acquisition and language evolution.
- 2017-2019 **MSc in Artificial Intelligence**, University of Amsterdam, Netherlands
- Graduated *cum laude*, GPA 9.1/10
  - *Master's Thesis Supervisors*: Dr Ekaterina Shutova, Dr Martha Lewis
- 2014-2017 **BSc in Artificial Intelligence**, University of Amsterdam, Netherlands
- Graduated *cum laude* and *with honours*, GPA 9.3/10
  - *Bachelor's Thesis Supervisors*: Dr Raquel Fernández, Dr Aysenur Bilgin

## Employment

- 2022 **Internship at FAIR labs at Meta, for the position of research scientist intern**, Paris, France
- *Managers*: Dr Dieuwke Hupkes, Dr Brenden Lake

## Publications

- 2022 **Can Transformer be too compositional? Analysing idiom processing in neural machine translation**  
Verna Dankers, Christopher Lucas, Ivan Titov. In *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 3608–3626 [[paper](#)]
- 2022 **The paradox of the compositionality of natural language: a neural machine translation case study**  
Verna Dankers, Elia Bruni, and Dieuwke Hupkes. In *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 4154–4175 [[paper](#)]
- 2022 **Meta-Learning for Fast Cross-Lingual Adaptation in Dependency Parsing**  
Anna Langedijk, Verna Dankers, Phillip Lippe, Sander Bos, Bryan Cardenas Guevara, Helen Yannakoudakis, Ekaterina Shutova. In *In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 8503–8520 [[paper](#)]
- 2021 **Generalising to German Plural Noun Classes, from the Perspective of a Recurrent Neural Network**  
Verna Dankers\*, Anna Langedijk\*, Kate McCurdy, Adina Williams, Dieuwke Hupkes. In *Proceedings of the 25th Conference on Computational Natural Language Learning*, pages 94-108 [[paper](#)] \*Equal contribution.  
**Best paper award.**
- 2021 **Episodic memory demands modulate novel metaphor use during event narration**  
Vesna Djokic, Verna Dankers and Ekaterina Shutova. In *Proceedings of the Annual Meeting of the Cognitive*

Science Society, 43 [paper]

- 2020 **Compositionality decomposed: How do neural networks generalise?**  
Dieuwke Hupkes, **Verna Dankers**, Mathijs Mul, and Elia Bruni. In *Journal of Artificial Intelligence*, 67, pages 757–795 [paper] [extended abstract]
- 2020 **Being neighbourly: Neural metaphor identification in discourse**  
**Verna Dankers**, Karan Malhotra, Gaurav Kudva, Volodymyr Medentsiy, and Ekaterina Shutova. In *Proceedings of the Second Workshop on Figurative Language Processing*, pages 227–234 [paper]
- 2020 **The Pragmatics behind Politics: Modelling metaphor, framing and emotion in political discourse**  
Pere-Lluís Huguet Cabot, **Verna Dankers**, David Abadi, Agneta Fischer and Ekaterina Shutova. In *Findings of the Association for Computational Linguistics: EMNLP 2020*, pages 4479–4488 [paper]
- 2019 **Modelling the interplay of metaphor and emotion through multitask learning**  
**Verna Dankers**, Marek Rei, Martha Lewis, and Ekaterina Shutova. In *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, pages 2218–2229 [paper]
- 2019 **Transcoding compositionally: Using attention to find more generalisable solutions**  
Kris Korrel, Dieuwke Hupkes, **Verna Dankers**, and Elia Bruni. In *Proceedings of the 2019 ACL Workshop BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP*, pages 1–11 [paper]
- 2017 **Modelling word associations with word embeddings for a guesser agent in the Taboo city challenge competition**  
**Verna Dankers**, Aysenur Bilgin, and Raquel Fernández. In *The 6th ESSENCE Workshop: the Taboo city challenge competition @ IJCAI-2017* [paper]
- 2017 **Modelling the generation and retrieval of word associations with word embeddings**  
**Verna Dankers**, Aysenur Bilgin, and Raquel Fernández. In *Proceedings of the 29th Benelux Conference on Artificial Intelligence (BNAIC)*, pages 401–402 [abstract]
- 2017 **Modelling word associations and interactiveness for describer agents in word-guessing games**  
**Verna Dankers**, Aysenur Bilgin, and Raquel Fernández. In *Proceedings of the 29th Benelux Conference on Artificial Intelligence (BNAIC)*, pages 408–409 [abstract]

## Honours & Awards

- 2021 The Best Paper Award, awarded at the CoNLL conference, online / in Punta Cana, Dominican Republic
- 2020-2024 PhD Funding, UKRI CDT in NLP, University of Edinburgh, Scotland
- Full scholarship covering tuition fees, programme costs and stipend (approx. £80,000 for 4 years).
- 2017-2019 ASML Technology Scholarship, Veldhoven, Netherlands
- Selected as one of the 25 best technical master’s degree students in the Netherlands in 2017
  - Awarded a scholarship and participated in a two-year professional development programme €10,000
- 2017 ESSENCE Workshop: Taboo city challenge competition @ IJCAI, 2<sup>nd</sup> price, Melbourne, Australia
- 2014 Leiden University Science Congress (*Wetenschapscongres*), 1<sup>st</sup> price, Leiden, Netherlands

## Competences

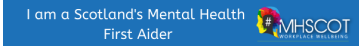
- **Technical Skills:** Python (*advanced*), Latex (*advanced*), Matlab (*advanced*), Java (*intermediate*), Prolog (*intermediate*), C++ (*beginner*), R (*beginner*), Bash (*beginner*)

- **Languages:** Dutch (*native*), English (*fluent*, TOEFL 119/120), German (*intermediate*), French (*pre-intermediate*), Norwegian (*beginner*)

## Teaching Experience

- 2021-2022 **Teaching Support at the School of Informatics**, University of Edinburgh, Scotland
- *Marker* for the Doing Research in NLP course for first-year PhD students.
  - *Teaching Assistant* for the undergraduate course Foundations of NLP.
- 2019-2020 **Teaching Assistant MSc Programme Artificial Intelligence**, University of Amsterdam, Netherlands
- *Courses taught:* Statistical Methods of Natural Language Semantics, Advanced Techniques of Computational Linguistics, Natural Language Processing 2.
  - *Responsibilities:* supervised research projects, gave guest lectures on ‘multitask learning’.
- 2015-2018 **Teaching Assistant BSc Programme Artificial Intelligence**, University of Amsterdam, Netherlands
- *Courses taught:* Introduction to Logic, Introduction to Artificial Intelligence, Linguistics and Language Processing, Linear Algebra, Fundamentals of Fuzzy Logic.
  - *Responsibilities:* organised weekly tutorials for 20 students, graded homework and exams.

## Miscellaneous

- 2021 I have contributed as a **reviewer** to CoNLL 2021 (\*outstanding reviewer), the BlackboxNLP 2021 workshop, and ACL 2022 through the ACL Rolling Review system.
- 2020-2024 I believe the role of a researcher encompasses more than standard academic duties, and also involves providing **peer support**, and contributing to **public engagement**:
- I am a Mental Health First Aider, qualified from 2020 to 2024 by MHScot through their Level 2 course.
 
  - I am a 2021 STEM ambassador in Scotland, and as an ambassador, I volunteer at the [DataKirk](#), an organisation with the mission to introduce children from the age of 9 to data science and coding to improve data literacy.
  - In December 2020, I was part of the [Orange Zone of “I’m a Scientist”](#), that connects primary school classes with scientists for Q&A sessions.

Last updated: June 15, 2022