Konstantinos Kogkalidis

CURRICULUM VITAE

PERSONAL INFORMATION

Date of Birth	19 July 1991
Nationality	Greek
Current Residence	Utrecht, the Netherlands
Pronouns	he/him

CONTACT & LINKS

konstantinos@riseup.net
github.com/konstantinoskokos
konstantinoskokos.github.io
aclanthology.org

INTERESTS

Structured & Discrete Machine Learning, Type & Proof Theory, Neurosymbolic Integration

ACADEMIA

2018 - **PhD Candidate**

Institution	Utrecht Institute of Linguistics OTS, Utrecht University
Research Topic	*Typelogical grammar induction for vector-based semantics from Dutch treebank corpora*
Promotors	Michael Moortgat & Richard Moot

2017 - 2019 **MSc in Artificial Intelligence, cum laude** (120 EC)

Institution	Graduate School of Natural Sciences, Utrecht University
Specializations	Logic & Reasoning (main track), Applied Data Science (profile)
Thesis	*Extracting & Learning a Dependency-Enhanced Lexicon for Dutch*
Supervisor	Michael Moortgat

2010 - 2017 **Diploma in Electrical & Computer Engineering** (300 EC, MSc equivalent)

Institution	Department of Engineering, Aristotle University of Thessaloniki
Specializations	Electronics & Computers
Thesis	*Matlab Simulation and a Model-Based Reflex Agent for the PacMan Game*
Supervisor	Athanasios Kehagias

INDUSTRY

2017 - 2018 **Machine Learning Engineer @** geekbot

- Unsupervised word vectors & topic modeling for short unstructured texts at scale
- Minimally supervised multi-aspect sentiment extraction

2011 - 2012 **Freelance Level Designer**

- Awarded 4th place award by ennovation.gr for a prototype experimental horror-adventure game.

TEACHING

2022 - 2023	Compositional Models of Vector-Based Semantics (ESSLLI 2022, guest lecture)
2021 - 2022	Logic & Language (UU AI MSc, TA)
2020 - 2021	Logic & Language (UU AI MSc, main instructor)
2019 - 2020	Machine Learning for Human Vision & Language (UU AI MSc, TA)
2018 - 2019	Logic & Language (UU AI MSc, tutorials, TA)
	Advanced Topics in Cognitive Modeling (UU AI MSc, TA)

All my academic contributions (papers, code, slides, etc.) are open-source and available through my website.

PUBLICATIONS & PREPRINTS

Diamonds are forever – theoretical and empirical support for a dependency-enhanced type logic
Michael Moortgat, Konstantinos Kogkalidis and Gijs Wijnholds
In *Logic and Algorithms in Computational Linguistics 2021*. 2022 (to appear)

Geometry-Aware Supertagging with Heterogeneous Dynamic Convolutions
Konstantinos Kogkalidis and Michael Moortgat
Under review. Preprint available on arXiv. 2022.

Discontinuous Constituency and BERT: A Case Study of Dutch
Konstantinos Kogkalidis and Gijs Wijnholds
In *Findings of the Association for Computational Linguistics*. 2022.

A Logic-Based Framework for Natural Language Inference in Dutch
Lasha Abzianizde and Konstantinos Kogkalidis
In *Journal of Computational Linguistics in the Netherlands*. 2021.

Fighting the COVID-19 Infodemic with a Holistic BERT Ensemble
Georgios Tziafas, Konstantinos Kogkalidis and Tommaso Caselli
In *Proceedings of the 4th Workshop on NLP for Internet Freedom*. 2021.

Neural Proof Nets
Konstantinos Kogkalidis, Michael Moortgat and Richard Moot
In *Proceedings of the 24th Conference on Computational Natural Language Learning*. 2020.

Æthel: Automatically Extracted Typelogical Derivations for Dutch
Konstantinos Kogkalidis, Michael Moortgat and Richard Moot
In *Proceedings of the 12th Language Resources and Evaluation Conference*. 2020.

Deductive Parsing with an Unbounded Type Lexicon
Konstantinos Kogkalidis, Michael Moortgat, Richard Moot and Georgios Tziafas
Preprint. 2019

Constructive Type-Logical Supertagging with Self-Attention Networks
Konstantinos Kogkalidis, Michael Moortgat and Tejaswini Deoskar
In *Proceedings of the 4th Workshop on Representation Learning for NLP*. 2019.

Towards a 2-Multiple Context-Free Language for the 3-Dimensional Dyck Language
Konstantinos Kogkalidis and Orestis Melkonian
In *At the Intersection of Language, Logic and Information*. 2019.

PRESENTATIONS

Neurosymbolic Proof Search for Linguistics
Logic for the AI Spring, Lame Como School of Advanced Studies, Como.

The Unicorn of Constant-Time Parsing
End-to-End Compositional Models of Vector-Based Semantics, ESSLLI 2022, Galway.

Dynamic Proof Nets [demo]
End-to-End Compositional Models of Vector-Based Semantics, ESSLLI 2022, Galway.

Logic-Based Parsing with Neural Networks
Compositional Models of Vector-based Semantics, ESSLLI 2022, Galway.

Supertagging Beyond Trees with Heterogeneous Dynamic Convolutions
Computational Linguistics in the Netherlands, CLIN32, 2022, Tilburg.

Logic-Based Reasoning for Natural Language Inference in Dutch
Computational Linguistics in the Netherlands, CLIN31, 2021, Utrecht.

From Text to Meaning: a Type-Driven Treebank and Applications [demo]
Language Sciences Day, 2021, Utrecht.

Neural Proof Nets
Conference on Computational Natural Language Learning, 2020, virtual.

Typed Supertags and Semantic Parses for Dutch
Computational Linguistics in the Netherlands, CLIN30, 2020, Utrecht.

Deductive Parsing with an Unbounded Type Lexicon
SemSpace 4, ESSLLI 2019, Riga.

Constructive Type-Logical Supertagging with Self-Attention Networks [poster]
The 4th Workshop on Representation Learning for NLP, 2019, Florence.

From Raw Text to Linear λ Terms
Compositionality in Formal and Distributional Models of Natural Language Semantics, 2019, Utrecht.

Towards a 2-Multiple Context-Free Grammar for the 3-Dimensional Dyck Language
ESSLLI Student Session, ESSLLI 2018, Sofia.

VOLUNTEERING

2016 - 2017 **Support of Relief Efforts in Refugee Camps**

- Weekly Humanitarian aid in the Diavata refugee camp (with metadrasi)
- Installation of mid-range wifi antennae around central Macedonia (with impact nomads)

EXTRACURRICURAL

Languages

Greek [native], English [working proficiency], Italian [intermediate],
German [B1, rusty], Dutch [basic]

Art & Crafts, Other

slow and heavy music, musical instruments (bass, guitar and didgeridoo), video games,
DIY & maker culture, bird watching, political theory & history