

Nathan Cornille

Curriculum Vitae

Research

Papers

- July 2024 **Conference paper**, *Conference on Language Modeling*.
[Learning to Plan for Language Modeling from Unlabeled Data](#)
- November 2023 **Journal paper**, *Entropy: Special Issue "Causality and Complex Systems"*.
[Causal Factor Disentanglement for Few-Shot Domain Adaptation in Video Prediction](#)
- February 2022 **Journal paper**, *Frontiers in Artificial Intelligence*.
[Critical Analysis of Deconfounded Pretraining to Improve Visio-Linguistic Models](#)

Presentations

- May 2023 **Oral and poster presentation**, *Colloquium on Fundamental Challenges on Causality*, Grenoble.
Investigating the Effect of Causal Mechanism Alignment on Transfer Learning for Few-Shot Video Prediction
- November 2020 **Poster and flashtalk**, *From Neuroscience to Artificially Intelligent Systems*, Virtual.
DIRT: Distributed Internal Regression Transformer
- December 2019 **Oral and poster presentation**, *3rd Human Brain Project Curriculum Workshop on Cognitive Systems*, Glasgow.
Improving Language Understanding in Machines through Anticipation

Dissertations

- June 2019 **Master thesis**, *KULeuven*, Leuven, 17/20.
Analysis and Improvement of Named Entity Recognition for Biomedical Articles

Education

- 2019–current (planned 2023) **PhD computer science**, *Language Intelligence & Information Retrieval lab, KULeuven*, Leuven.
Representation Learning, Causality, Natural Language Understanding, Neuromorphic Computing
- 2017–2019 **Master computer science**, *KULeuven*, Leuven, 85.27% (Top 3% of 96 students).
Option Artificial Intelligence
- Fall of 2018 **Exchange semester**, *Tsinghua University*, Beijing, 92.33% - 3.8 GPA.

- 2014–2017 **Bachelor engineering sciences**, *KULeuven*, Leuven, 79.22% (Top 10% of 326 students).
Option Mechanics - Computer Science
- 2008–2014 **Secondary education**, *Sint-Michielscollege Brasschaat*, Brasschaat, 88.7%.
Option Ancient Greek - Mathematics

Working Experience

Teaching

- 2018-2021 **Teaching Assistant**, *KULeuven*, Leuven.
Natural Language Processing (2021, 2022), Object-Oriented Programming (2019, 2020, 2021), Science Communication (2021), Methodology of Informatics (2018,2019)
- 2016 - 2018 **Math tutor**, *Sagio vzw*, Leuven.

Industry

- Summer 2019 **Associate Consultant Intern**, *Bain & Company*, Brussels.
Working on a European pricing strategy for a large consumer-goods company
- Summer 2018 **Blockchain intern**, *IntellectEU*, New York City.
Doing research into methods for privacy in permissioned blockchains and automating financial message mapping
- Summer 2017 **Software developer**, *Irex Consulting*, Brussels.
Developing an Android application and a website.
- Summer 2015 **Fundraiser**, *ONG Conseil*, Antwerp.
Asking people in the street to become supporters for Oxfam Solidarity.

Languages

Dutch	Native	
English	Fluent	
French	Good	<i>Can hold conversations</i>
Spanish	Limited	<i>Limited understanding, speaking and writing (level A2-Waystage)</i>

Engagements

- Board Of European Students of Technology
An organisation that provides complementary education abroad for technology students, as well as organising engineering and other competitions. I was the co-Main Organiser of the 2019 Summer Course, and was the treasurer in 2017-2018.