

Nathan Cornille

Curriculum Vitae

Summary

Computer Scientist (PhD graduate) with deep expertise in AI, NLP, and representation learning, and an interest in applying this expertise to solve real-world problems.

Working Experience

Industry

June 2025 – **AI Software Engineer**, *IntellectEU*,
... Antwerp.

Academic Research

Oct 2019– Jan 2025 **PhD computer science**, *Language Intelligence & Information Retrieval lab, KULeuven*, Leuven.
Representation Learning, Causality, Natural Language Understanding, Neuromorphic Computing

Teaching

2018-2024 **Teaching Assistant**, *KULeuven*, Leuven.
Capita Selecta Artificial Intelligence (2024), Natural Language Processing (2021, 2022, 2023), Object-Oriented Programming (2019, 2020, 2021), Science Communication (2021), Methodology of Informatics (2018,2019)

2016 - 2018 **Math tutor**, *Sagio vzw*, Leuven.

Internships

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.

Other

Feb 2025 – Apr 2025 **Post-PhD Travel**.
3-month travel through Argentina, Chile, Bolivia and Peru following doctoral studies.

Research Output

Papers

October 2024 **Arxiv paper**, *Arxiv*.
[End-to-end Planner Training for Language Modeling](#)

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](#)

Dissertations

Jan 2025 **PhD thesis**, *KULeuven*, Leuven.
[Representation Learning for Vision and Language](#)

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

Education

2017–2019 **Master computer science**, *KULeuven*, Leuven, Summa Cum Laude: 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, Magna Cum Laude: 79.22% (Top 10% of 326 students).
Option Mechanics - Computer Science

Technical Skills

Programming Languages	Python, Java, Bash
Libraries	PyTorch, Numpy, Pandas, Matplotlib, Lightning, slurm, scikit
Tools	Git, HPC usage, Excel, Latex

Languages

Dutch	Native	
English	Fluent	
French	Good	<i>Can hold conversations</i>
Spanish	Limited	<i>Level B1-Breakthrough</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.