# Tim Kreutz

## Curriculum Vitae

Gelkingestraat 5-2 9711NA Netherlands M +31 (06) 16 72 03 41 E tjkreutz@gmail.com tjkreutz.github.io Motivated data scientist with 6+ years of experience in academic research and applied machine learning. Great with collaboration and leading projects. I hope to make the next step in building models to fix real-world problems.

#### Education

#### PhD in Linguistics, University of Antwerp.

2017-2022

I was part of the Computational Linguistics group CLiPS (www.uantwerpen.com/clips), where I worked on the NWS Data project. This interdisciplinary research effort examines the dynamics of news, politics and the public, in a world where the internet and social networking sites make up more of our everyday lives. See tjkreutz.github.io/publications for a full list of resulting publications.

**Master of Science - Information Science**, University **2015–2017** of Groningen, *8.3*.

The Master Information Science offers more in-depth courses on Machine Learning and Language Models. For my master thesis, I predicted applicable laws for Dutch court cases: tjkreutz.github.io/files/Kreutz-1.pdf.

Honours Bachelor, University of Groningen, 8.0. 2013–2015

The Honours College is open to students who excel in their regular programs. It offers workshops that help to develop students' debating, writing and collaborating qualities and aims to further deepen and broaden the knowledge offered by their regular studies.

**Bachelor of Science** - **Information Science**, *University* **2012–2015** *of Groningen*, *8.0*.

The BA Information Science combines basics of communication, computer science and linguistics. There is a heavy focus on using big textual data for a range of purposes including contextual similarity extraction for words, trend detection, and information retrieval.

- Graduated Cum Laude
- o With official recommendation from dean Prof. dr. E. Sterken

Bachelor of Science - Sociology, *Erasmus University*, **2009–2014** Rotterdam, *7.0*.

The Bsc Sociology at the Erasmus University is heavily focused on sociological theory and qualitative research methods. However, for my graduation project I took a semi-quantitative approach in analyzing similarity between discussions on illness and posts extracted from the NoFap subreddit: www.reddit.com/r/nofap.

VWO - Economy and Society, Christelijk Lyceum Delft, 2002–2009

.

# **Experience**

#### **Vocational**

Machine Learning Engineer, Dataprovider.com. 2022 - current Research and development of features for the B2B search engine Dataprovider.com.

**University** Lecturer, University of 2021 - 2022 (8 months) *Groningen.* 

I taught and managed two courses: Computational Grammar and Project Text Analysis. Computational Grammar is an Information Science bachelor course and an elective course for A.I. students that focuses on context-free grammars in Prolog. In Project Text Analysis groups of students developed a question answering system in Python.

#### Developer, Belsimpel.

2016 - 2017 (13 months)

After my internship on Data Science & Analytics at Groningen's largest webshop, I stayed on with its development team. Specifically, I built the recommendation system for up- and cross-selling during the purchasing process. I was also generally involved with the quality of the website's back end.

#### **Teaching Assistant**, *University of Groningen*.

2013-2016

I was a TA for all Python programming courses in the first year curriculum of Information Science in Groningen. There are four courses: Introduction to Programming I, Introduction to Programming II, Advanced Programming and Project Text Analysis. Teaching these courses for three years continuously gave me thorough understanding of programming paradigms and software architecture.

## Relevant Projects

**Lead Developer**, *Vaccinpraat*, https://vaccinpraat. **2021** uantwerpen.be.

A spin-off from Politieke Barometer (below), Vaccinpraat monitors fine-grained sentiment about vaccination in Belgium and the Netherlands. The stance detection in social media data (Twitter and Facebook) now used fine-tuned BERT-like models. I supervised a team of two PhDs and a master student.

**Lead Developer**, *Politieke Barometer*, **2019** https://politiekebarometer.uantwerpen.be.

We developed a monitor for the 2019 Belgian federal elections that tracked mentions of politicians, parties and relevant topics in digital media. This was a full-stack involvement from database design to visualizations using Plotly in the front-end.

Lead Developer, Gemeente Leiderdorp. 2014 (4 months)

In a project to engage citizens with Leiderdorp, We designed and developed a SIMCITY-like game for the Android operating system.

### Languages

**Dutch**: Native proficiency

**English**: Full professional proficiency. C2 level. **German**: Limited working proficiency. B1 level.

# Software skills

Programming:

Python:
PHP:
Go:

Machine Learning and NLP:

Transformers:
Scikit-Learn:
LangChain:
Tensorflow:
PyTorch:
R:

Data Analytics:

Dash, Plotly:
Gradio:
Elasticsearch:
SQL: