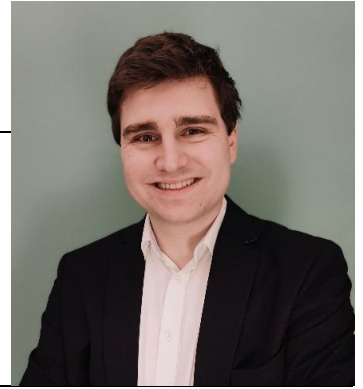


# Curriculum Vitae



## Personal details

<i>Name</i>	Thomas Werthenbach
<i>Date of birth</i>	25-06-2000
<i>Nationality</i>	Dutch
<i>Email address</i>	<a href="mailto:tak.werthenbach@gmail.com">tak.werthenbach@gmail.com</a>

## Work experience

### Software Engineer | BeDataDriven

*Jul 2022 – Present* | The Hague | NGO-focused tech company

BeDataDriven develops ActivityInfo, a platform for managing data in humanitarian and development operations. It enables NGOs to quickly deploy advanced tools for data collection, monitoring, and analysis, even when offline.

- Building query planners, optimizers and executors for our custom DBMS.
- Created a real-time, spreadsheet-like interface with advanced validation, ensuring accessibility and usability for non-technical users, while maintaining custom constraints.
- Implemented robust offline support (service workers, caching, IndexedDB) to allow teams in remote regions to continue working without connectivity.
- Mentoring junior software engineers on software development projects.

**Main skills:** Java, Google Cloud, analytic thinking, dynamic programming and design patterns

### Lead Software Engineer / Co-founder | AndMore Direct

*Oct 2021 – Present* | Hoofddorp | Contract Management for SMEs & Non-profits

Founded AndMore Direct to build a reliable contract management system with integrated vendor management, focused on the needs of small and medium-sized enterprises and non-profits.

- Designing and implementing software architectures from scratch.
- Collaborated closely with clients to establish feature specifications and ensure smooth user experiences.
- Overseeing the development of all software development projects, as well as long-term support.

**Main skills:** Python, Django, Angular CLI, Azure, monolithic architecture, product ownership, leadership

### Software consultant | NAVARA

*May 2021 – Oct 2021* | Driebergen | Software consultancy

Contributed to the development of a social networking platform aimed at reducing gender discrimination in professional settings, and collaborated on a payroll-integrated loan system for a fintech startup. Also advised clients on technical architecture and delivered scalable solutions using both serverless and monolithic environments.

**Main skills:** C# .NET, Angular CLI, Azure, CI/CD

### Software Developer | Ticket Team

*Jul 2019 – Apr 2021* | Sassenheim | Access Control Systems

Contributed to a stadium access system and redesigned its reporting tools. Also built an automated update wizard to manage deployments, database migrations, and guarantee data integrity.

**Main skills:** Delphi and PostgreSQL

### Software Developer | De Bijlesmeester

*Jun 2019 – Jul 2019* | Amsterdam | EdTech & Tutoring

Developed a CRM for tutor-student matching and helped build an online learning platform. Worked on both the back-end and front-end to deliver educational tools and scheduling functionality.

**Main skills:** Python, JavaScript, PostgreSQL, Django and monolith server management

## Education

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### **MSc Computer Science** | Delft University of Technology (TU Delft)

2023 | Track: Software Technology

Graduated **cum laude** with a GPA of 8.6. Completed in nominal time at 0.4 FTE alongside professional work.

### **BSc Computer Science and Engineering** | Delft University of Technology (TU Delft)

2021 | Track: Systems

Graduated **cum laude** with a GPA of 8.2. Completed in nominal time at 0.4 FTE alongside professional work.

## Internships

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### **Master thesis** | Towards Sybil Resilience in Decentralized Learning

Nov 2022 – Jul 2023 | Delft University of Technology | Distributed Systems Research Group

Designed and implemented the first defence mechanism against Sybil attacks (fake identity attacks) in decentralized learning systems, contributing to fairer distributed machine learning. Published on arXiv: [arXiv:2306.15044](https://arxiv.org/abs/2306.15044)

### **Literature survey** | Survey on social reputation mechanisms: Someone told me I can trust you

Sep 2022 – Oct 2022 | Delft University of Technology | Distributed Systems Research Group

Explored various trust and social reputation mechanisms, highlighting their relevance by linking them to real-world social phenomena. Published on arXiv: [arXiv:2212.06436](https://arxiv.org/abs/2212.06436)

### **Bachelor Thesis** | Inferring Log-Based Behavioural System Models Using Markov Chains

Apr 2021 – Jul 2021 | Delft University of Technology | Software Engineering Research Group

Used probabilistic models to analyse complex software behaviour from system logs. Published in [TU Delft Repository](https://repository.tudelft.nl/handle/11122/170000).

### **Mathematics Teacher**

Sep 2020 – Jan 2021 | Johan de Witt Scholengroep, Schilderswijk (The Hague)

Taught high school mathematics in one of the Netherlands' most diverse neighbourhoods. Earned second-degree teaching qualification (tweedegraads bevoegdheid).

## Extracurricular activities

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### **Member** | Effective Altruism Delft

2022 – 2023

Completed fellowship and took part in discussions on the most effective ways to make a positive impact.

### **Member** | Socrates International Honour Society

Jun 2018 – Present

Invited because of early academic achievements.

### **Scouting Leader** | Waterscouting Mees Toxopeus

Oct 2016 – Nov 2018 | Beverwijk

Organised weekly activities for two age groups of children aged 5–11.

## Additional Skills

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**Programming Languages:** Python, Java, C#, Delphi/Pascal, JavaScript, TypeScript

**Web & Front-End:** Angular CLI, HTML/CSS

**Back-End & Frameworks:** Django, .NET, Jersey

**Databases & Data:** PostgreSQL, SQL

**DevOps & Infrastructure:** Azure, CI/CD, monolith and serverless architectures

## Languages

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Dutch: Native

English: Fluent