

# Curriculum Vitae

Dr. Tom Wiesing

Erlangen, Germany

tom@tkw01536.de - <https://github.com/tkw1536/>

## Professional Experience

### Research Software Engineer

*Competence Center for Research Data and Information*

Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

09/2021 - present

- Developed and maintained research data management systems used across academic projects.
- Co-led interdisciplinary teams to design, build & integrate software solutions into research workflows.
- Led deployment pipelines to configure, document & maintain infrastructure using Docker, Ansible & Git.

### Research Software Engineer (Exchange Visitor)

*Applied and Computational Mathematics Division - Mathematical Software Group*

National Institute of Standards and Technology (NIST), Gaithersburg, MD, USA

- **06/2021 - 08/2021:** Added support for presentations (beamer package)
- **11/2019 - 01/2020:** Modernized bibliography processing to match existing workflows
- **06/2018 - 08/2018:** Improved Docker-based CI & Testing Infrastructure
- **06/2017 - 08/2017:** Onboarded to LaTeXML (a LaTeX To XHTML converter) & improved LaTeX parsing

### Research Software Engineer

*KWARC Group, Friedrich-Alexander-Universität Erlangen-Nürnberg*

09/2017 - 08/2021

- Built knowledge representation tools and scientific knowledge services.
- Implemented backend systems for semantic markup and interactive publishing.

*KWARC Group, Jacobs University Bremen (now Constructor University Bremen)*

07/2015 - 05/2017

- Maintained & developed tools to support formal and informal mathematics research.

### Board Member (IT Assessor)

*Jacobs University Alumni Association*

01/2018 - 05/2024

- Volunteer work, collaborated with a diverse interdisciplinary team of other board members.
- Maintained technical resources of the association, such as Google Workspace accounts and websites.
- Designed, implemented & deployed a custom application to manage association members based on Django.

## Education

### Doctor Of Engineering

Friedrich-Alexander-Universität Erlangen-Nürnberg

Dissertation: *Towards A Commons Of Object-Centered Research Data*

doi: [10.25593/open-fau-1825](https://doi.org/10.25593/open-fau-1825)

### Master Of Science in Data Engineering

Jacobs University Bremen (now Constructor University Bremen)

### Bachelor of Science in Applied & Computational Mathematics

Jacobs University Bremen (now Constructor University Bremen)

## Skills

#### Programming Languages & Frameworks

Go

Python

TypeScript

PHP

Django

React

#### Tools & Platforms

Docker

Git

Linux Sysadmin

Traefik

Docker Compose

GitHub Actions

Ansible

Nginx

#### Spoken Languages

German (native)

English (bilingual)