

# Thomas Karl

## Curriculum Vitae

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### Personal Data

Name Thomas Michael Karl  
Nationality Germany  
Date of Birth April 8, 1994

### Education

Oct. 2018 – March 2021 **Computational Science**, *University of Regensburg*, Germany  
Degree: Master of Science  
Oct. 2012 – Nov. 2016 **Physics**, *University of Regensburg*, Germany  
Degree: Bachelor of Science  
Sep. 2004 – Jun. 2012 **Donau Gymnasium (High School)**, Kelheim, Germany  
Degree: General Higher Education Entrance Qualification

### Working Experience

Since Oct. 2021 **Software Developer**, *OneVision Software AG*, Development of imposition software (sheet assembly for prepress) as backend for automatisisation, complete redesign incl. software design and architecture in a team of five, implementation entirely in Modern C++ (2020 standard) for Windows and Linux, integration of in-house build system in “Visual Studio Code”, continuous integration with “Jenkins”, unit tests and benchmarks with “Googletest”  
Feb. 2020 – Aug. 2020 **Intern**, *MueTec GmbH*, Hardware acceleration and memory management of image processing algorithms with “OpenCV”  
Summer Term 2019 – Summer Term 2020 **Course Instructor**, “*Scientific Computing with Graphical Processing Units*”, Development and supervising of a lecture, maintaining teaching material, mentoring of an exercise class, converting lecture and exercise into pure online course, administration of a software stack  
Winter Term 2018 – Winter Term 2020 **Course Instructor**, *Introduction to “ $\LaTeX$ ”*, Supervising of the lecture, maintaining teaching material, converting lecture and exercise into pure online course  
Summer Term 2017 – Winter Term 2020 **Graduate Research and Teaching Assistant**, *Introduction to “ $\LaTeX$ ”*, Mentoring of an exercise class  
2017 – 2020 **Graduate Research and Teaching Assistant**, “*Physics for medical Students*”, Supervising exercise groups for a laboratory practicum

Summer Term 2016 **Teaching Assistant**, *Theoretical Electrodynamics*, Mentoring of an exercise class

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## Language Skills

German **Native Speaker**

English **Business Fluent**, *Six years school education; Level B1+ according to "Common European Framework of Reference for Languages (CEFR)"*

Latin **Latinum**

Japanese **Intermediate User**, *UNlcert<sup>®</sup> I, corresponding to B1 CEFR*

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## IT Skills

Operating Systems **Windows, Linux (Debian, Ubuntu, ArchLinux, Raspberry Pi OS)**

Scientific Computing **C, C++, Python**

High Performance Computing **MPI, OpenMP, Nvidia CUDA, OpenCL, Xilinx Alveo**

Web Programming **php, SQL, HTML, javascript**

Electronics **Microcontroller, FPGA, LabVIEW**

Tools **Eclipse, Xilinx Vitis, Nvidia Nsight, Microsoft/Libre Office, MS Visual Studio Code, Data Visualization: Gnuplot, Python Matplotlib, LATEX-TikZ, Software development: make, cmake, git, svn, doxygen, jenkins, gtest/gmock**

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## Hobbies - Interests

Chess Active chess player since elementary school at SK Kelheim 1920 e.V., Bavarian vice-champion in school chess in 2012, former U20 team player (rank 9 at German championship of 2010), team captain from 2012 to 2018, responsible for public press relations from 2018 to 2022, design of a jubilee publication and coordination of a team of authors

Programming Development, maintenance and publishing of open-source projects at <https://github.com/ThomasMKarl>.

Musik Two years early musical education at the age of 6, 9 years trumpet lessons, until 2015 member of the municipal music school orchestra in Kelheim.

Kelheim, January 9, 2023



Thomas Karl