

# Frederik Berg

<https://frederikberg.com>

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## Academic Career

- 09/2023 – Present **Upskilling in Information Security and AI Safety**, *RWTH Aachen*, Lecture: Cryptography and network security, Certificates: TryHackMe and Google Professional Cybersecurity Certificate, CompTIA Security+ in progress.
- 08/2022 – 09/2023 **[Quit] PhD Computer Science**, *Chair for Embedded Software at RWTH Aachen*, Research: functional safety of medical embedded devices (first author publication, for more see Google Scholar), Teaching: managing and supervising seminar students and giving tutorials.
- 04/2022 – 10/2022 **[One Semester] Computer Science Fundamentals**, *RWTH Aachen*, Gathering preliminary computer science knowledge like data and algorithmic foundations.
- 04/2019 – 01/2022 **Master Automation Engineering**, *RWTH Aachen*, Specializing on embedded programming, Master thesis: "Design of a Software Architecture for a Blood Pump Control and Selection of a Control Strategy for the Blood Pressure" (Grade: 1.0), Final grade: 1.4.
- 07/2017 – 12/2017 **Erasmus Semester Abroad**, *Norwegian University of Science and Technology Trondheim*, Lectures about system development and programming.
- 10/2014 – 12/2018 **Bachelor Mechanical Engineering**, *Leibniz University Hanover*, Bachelor thesis: "Programming of a smartphone's camera for detection and demodulation of light signals in optical wireless channels" (Grade: 1.0), Final grade: 2.0.
- 2014 **Abitur**, *Leibnizschule Hannover*, Final grade: 1.2.

*German Grades: 1.0 = A, 5.0 = F*

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## Experience

- 11/2023 - Present **Development and publishment of a Nextcloud server app**, *PHP, JavaScript, Vue and Gitlab CI*, (Link to project).
- 08/2023 **Maschine Learning 4 Good (ML4Good)**, *Germany*, AI safety and alignment camp, Personal project: Compute governance.
- 03/2023 - Present **Effective Altruism Aachen local group co-organizer**, *Germany*.
- 10/2020 – 08/2022 **Software Development for Measurement Equipment (Student Job)**, *Chair for Embedded Software at RWTH Aachen*, Design and implementation of software to control measurement equipment like a blood pump control.
- 04/2019 - Present **Linux Homeserver Development and Software Projects**, *frederikberg.com*.
- 10/2018 – 03/2019 **Android App Development (Student Job)**, *Institute of Transport and Automation Technology Hannover*, Programming a camera module and processing signals.
- 05/2017 – 07/2017 **Software Development (Internship)**, *KraussMaffei Berstorff GmbH Hannover*, Programming of the control system BPC Touch.

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## Languages

German native  
English fluent