

# AMANDA MATTHES

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## Education

10/2019 - 09/2023: **University of Oxford** - Oxford, UK

PhD candidate at the EPSRC Centre for Doctoral Training in Autonomous Intelligent Machines and Systems

10/2015 - 07/2019: **University of Heidelberg** - Heidelberg, Germany

BSc in physics with emphasis on computer science - Grade: 1.3<sup>1</sup>

- BSc thesis topic: Exploiting Instruction-Level-Parallelism - Hardware Structures for Superscalar Out-of-Order Processors
- Course topics include: linear algebra, calculus, machine learning, hardware design, technical computer science, applied computer science, algorithms and data structures, mechanics, electrodynamics, special relativity, quantum physics and particle physics
- 24 credits  $\approx$  600-700h of laboratory work (executing and documenting over 40 experiments)

09/2017 - 06/2018: **University of Manchester** - Manchester, UK

Erasmus+ year

- Course topics included: quantum computing, applications of quantum physics, philosophy of physics, quantum field theory, lagrangian dynamics, solid-state physics, astrophysics and cosmology, exoplanets and object-oriented programming in C++
- Active member of the Systematic Martial Arts Society and the historical reenactment society Historia Normannis

09/2010 - 07/2015: **St.-Anna-Gymnasium** - Munich, Germany

Abitur (German A-levels) - Grade: 1.4

- Final exam subjects: Maths, Physics, English, German, Economics and Law
- Seminar thesis on “The idea of light as a wave in the 19th century”
- Awarded the DPG-Abiturpreis by the German Physical Society for outstanding performance in physics

<sup>1</sup>German grades work on a scale of 1.0 to 5.0, with 1.0 being the best

09/2013 - 07/2014: **Technical University of Munich (TUM)** - Munich, Germany

Early studies in computer science

- Attended lectures and a seminar as part of a program for highly motivated students that have not yet finished school

## Additional Experience

07/2019 - 08/2019: **CERN** - Geneva, Switzerland

Summer Intern at the CERN Data Centre

06/2019: **ISC 2019** - Frankfurt, Germany

Student Volunteer at the ISC 2019

03/2019 - 05/2019: **Institute for Computer Engineering (ZITI)** - Heidelberg, Germany

Student research assistant for the Computer Architecture Group

10/2018 - 03/2019: **University of Heidelberg** - Heidelberg, Germany

Tutor for the course “Introduction to technical computer science”

05/2017 - 08/2017: **Google**

Participant in the exclusive development program CodeU for high potential students

01/2011 - 08/2013: **St.-Anna-Gymnasium** - Munich, Germany

School “paramedic”

2012 - 2013: Team leader

## Skills and Hobbies

Language Skills	German: Native speaker
	English: Fluent (C1 with DAI certificate)
Computer Skills	Data analysis with Python
	Hardware design with Verilog
	Application programming with C++
	Experience with Latex and Microsoft Word, PowerPoint and Excel
	Basic knowledge of web programming
Hobbies	Weight lifting, yoga, embroidery and cooking