Marvin Beckmann

Curriculum Vitæ

Education

10/2024–Present	**PhD Student**, *Technical University Denmark (DTU)*. On post-quantum key exchange under the supervision of Christian Majenz
10/2022–9/2024	**Master Computer Science**, *Paderborn University*, Average: 1.0 with distinction. "Module-Based Fiat-Shamir Lattice Signature with Convolved Gaussians"
10/2019–09/2022	**Bachelor Computer Science**, *Paderborn University*, Average: 1.6. "Analysis of an interactive lattice based aggregated signature scheme"
2011–06/2019	**General Higher Qualification for University Entrance**, *Gymnasium Barntrup*, Average: 1.0.

Research-Related

03/21/2025	**Nordicrypt**, *IT University of Copenhagen*. Presentation on ODD-SAKE (not yet published)
05/26/2024–05/30/2024	**PenteQost**, *Siegen University*. PenteQost Spring School on Quantum Science 2024
03/08/2024	**YRCS**, *Paderborn University*. Presentation on [Por+23a; Por+23b]

Experience

University

02/2025–Present	**Master Thesis Co-Supervision**, *Technical University Denmark*. "Algebraic lattices and authenticated key encapsulation mechanisms"
02/2025–Present	**Teaching Assistant**, *Technical University Denmark*, Introduction to Numerical Algorithms.
04/2023–10/2024	**Student Research Assistant**, *Paderborn University*, Research under the supervision of Prof. Dr. Johannes Blömer on lattice-based signatures, device-independent quantum key distribution, quantum algorithms for BDD and further development of qFALL [Por+23a; Por+23b].

04/2021–09/2023	**Student Assistant**, *Paderborn University*, Planning lecture slots for the Computer Science Department.
10/2020–03/2024	**Teaching Assistant**, *Paderborn University*, Modelling, Data structures and Algorithms, 2 x Computability and Complexity, Introduction to Cryptography, Foundations of Cryptography.
08/2020–10/2021	**Teaching Assistant Training**, *Paderborn University*, Training for online teaching and Moodle.

Academic Self-Administration

As PhD Student

01/2025–Present	**PhD Committee**, *Technical University Denmark*. In DTU Compute

As Student

2023–2024	**Committee for Research and Junior Academics**, *Paderborn University*.
2023–2024	**Student Parliament**, *Paderborn University*.
2023–2024	**Committee for Deutschlandstipendium**, *Paderborn University*.
2022–2023	**Study Advisory Council**, *Paderborn University*. In the Faculty of Electrical Engineering, Computer Science and Mathematics
2022–2023	**Examination Committees**, *Paderborn University*. In Computer Science and Mathematics
2022	**Weierstraßcommittee**, *Paderborn University*. Awards the price for best teaching
2021–2023	**Committees of Study Content**, *Paderborn University*. In Computer Science and Mathematics
2021–2024	**PhD Committees**, *Paderborn University*. In Computer Science (3 years) and Mathematics (1 year)
2021–2023	**Evaluation Committees for Juniorprofessorships**, *Paderborn University*. In Computer Science (1) and Mathematics (2)
2021–2022	**Appointment Committees**, *Paderborn University*. In Computer Science (1) and Mathematics (1)

Social

11/2022–09/2024	**All Day Research Podcast**, *Paderborn University*, Host. Podcast of the Computer Science Department
10/2020–09/2024	**Student Council Mathematics and Computer Science**, *Paderborn University*, Organisation of Orientation-Week, events and academic self-administration.
01/2018–10/2019	**Taekwondo Training for Children**, *TV Barntrup*.
02/2018–07/2019	**Jugendklimaparlament Lippe**, *Detmold*, Co-Founder. Youth Climate Parliament of the district Lippe

| 08/2014–07/2019 | **Student Council at School**, *Gymnasium Barntrup*, Student Body President, Treasurer, several Events: e.g. Projectweek, "Tag für Afrika". |

Awards and Scholarships

04/2022-09/2024	**PRISMA**, *Paderborn University*, Support Programm for excellent Computer Science Master Students (for Research-Interested Students).
09/2021–Present	**Heinz-Nixdorf Program EIM**, *Paderborn University*, Support Program for excellent Computer Science Bachelor Students.
10/2020-09/2023	**Deutschlandstipendium**, *Stiftung Studienfonds OWL*, Scholarship.

Languages

German	**Native**
English	**Fluent**
Swedish	**Beginner**
Danish	**Beginner**

Programming Skills

Rust

Python

R

Interests

- Teakwondo (1.DAN, TV Barntrup & DTU Son Taekwondo)
- Fitness
- Ultimate Frisbee
- Tennis (TC Barntrup & VSV Teutonia Silixen)
- Badminton (TV 1875 Paderborn)
- Swimming

References

[Por+23a] Laurens Porzenheim, Marvin Beckmann, Paul Kramer, Phil Milewski, Sven Moog, Marcel Schmidt, and Niklas Siemer. *qFALL-crypto*. 2023. URL: `https://github.com/qfall/crypto`.

[Por+23b] Laurens Porzenheim, Marvin Beckmann, Paul Kramer, Phil Milewski, Sven Moog, Marcel Schmidt, and Niklas Siemer. *qFALL-math*. 2023. URL: `https://github.com/qfall/math`.