

## EDUCATION

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- **PhD Student in Computer Science** Aachen, Germany  
*RWTH Aachen University* Oct 2022 – Expected 2026
- **Master of Science in Computer Science** Aachen, Germany  
*RWTH Aachen University; Grade: 1.2* Oct 2020 – Oct 2022
- **Bachelor of Science in Computer Science** Aachen, Germany  
*RWTH Aachen University; Grade: 1.4* Oct 2017 – Oct 2020
- **Abitur (High School Graduation)** Soest, Germany  
*Aldegrevener Gymnasium; Grade: 1.7* Oct 2009 – Oct 2017

## EXPERIENCE

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- **App-Stone GmbH**  Soest, Germany  
*Founder & Shareholder* Mai 2018 – Present
  - **Foundation:** Founded Capybara Software UG (haftungsbeschränkt) in 2018 together with 3 other colleagues from my high school. After 2 years we made enough income to found App-Stone GmbH. Both companies specialize in mobile app development (iOS or Android) on demand.
  - **Management:** Managing and organizing the company of up to 10 Employees in different areas. This includes business decisions, e.g., deciding whether we need more employees or new software, performing job interviews, project management via Jira, project planning, and writing project offers including price calculation.
- *Software Engineer* Mai 2018 – Present
  - **Android Development:** Development of mobile Android applications with Android Studio in Java.
  - **iOS Development:** Development of mobile iOS applications with Xcode in Swift.
  - **Flutter (Hybrid Mobile Development):** Flutter is a framework for building natively compiled, multi-platform applications from a single codebase. Leading to a reduction in maintenance and development costs for multi-platform projects.
  - **Server Development:** Development of server backends with Django in Python. Servers are dockerized with Postgres as database and Unicorn and Nginx for handling requests, serving static files for the backend, etc. Deployed on an AWS server.
  - **Testing and Error Fixing:** Testing with JUnit and error detection and analysis via Crashlytics of Firebase.
- **RWTH Aachen University**  Aachen, Germany  
*Research and Teaching Assistant* Oct 2022 – Present
  - **Research Assistant – Probabilistic Program Verification:** The goal of my PhD project was to develop fully automatic techniques to analyze termination and expected runtime of functional probabilistic programs working with arbitrary data structures by analyzing probabilistic term rewrite systems. Please have a look at my website for a list of all publications.
  - **Teaching Assistant – Programming Languages and Verification:** Designing exercises, performing exercise sessions, assisting in lectures, etc. See my website for a list of all courses I participated in.

## PROJECTS

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- **AProVE:** AProVE (Automated Program Verification Environment Web Interface) is a tool for automatically proving termination, runtime complexity, safety, etc. of several programming languages like Java, C, or Haskell.
- **BWL Champion:** BWL Champion is an app that allows users to test and expand their business knowledge digitally at any time via Quizzes and can even be played competitively.
- **AABC:** African Alphabets of the Bayreuth Cluster (AABC) provides mobiles and desktop PCs (Windows and iOS) with keyboards for all common African languages and scripts.
- **Amsel - Build up your voice:** Amsel is a mobile application for singers of every performance level. It provides many warm-up techniques and exercises to develop a more professional singing voice.

## SKILLS AND HOBBIES

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**Languages:** Java, Python, Dart

**Technologies:** AWS, Docker, Git

**Hobbies:** Competitive (E-)Sports, e.g., playing Handball, playing E-Bass and learning Violin