

Lina Hirschhoff

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16.11.1994



Education

2004–2012 **Abitur**, *Gymnasium Meßstetten*, GPA: 1,3.
Focus on Math, Physics, English and German

2013–2016 **Bachelor of Engineering, Technical Computer Science**,
DHBW Ravensburg Campus Friedrichshafen, GPA: 1,4.
Focus: Technical Understanding of Computer Processes

Bachelors Thesis

Title *Multi-Tenancy Support for Encrypted Databases*

Description Enhancement of a JDBC driver for encrypted databases. Implementation of a prototype and evaluation of three approaches to multi-tenancy support.

2016–2018 **Master of Science, Computer Science**,
Karlsruhe Institute of Technology, Current GPA: 1,4.
Focus: Software Engineering, Cognitive Systems

Masters Thesis

Title *Secure Group Data Sharing in the Cloud with the use of Trusted Execution*

Description Design and implementation of a secure data sharing mechanism using trusted execution environments. Performance evaluation of a prototype built with Intel Software Guard Extensions (SGX)

Vocational Experience

2012–2013 **Voluntary Year of Social Service**, *Schwäbischer Turnerbund, Kunst-Turn-Forum*, Stuttgart.

Management of professional sports in Baden-Wuerttemberg
Coach of the national junior squad in athletic gymnastics

2013–2016 **Corporate Student, SAP SE.**

Working as software developer in various departments.

- *HANA Platform Application Development, St. Leon-Rot.* Unit Testing in SAP UI5-Controller
- *EHS PSS PI, Markdorf.* Development of a data analytics tool in ABAP and provisioning of the results to an SAP UI5 interface
- *Global Label Management (GLM), Markdorf.* Development of a UI5 application to search EHS reports in GLM, creation and maintenance of OData services
- *Development Culture, Palo Alto.* Organization of workshops and events in the local d-shop in Palo Alto, building a 3d-printed IoT showcase with Arduino. [Link to blog entry](#)
- *Content as a Service (CaaS) Development, Markdorf.* Data modelling and backend implementation for a Kanban application, performance tracking and improvement on SQL statements, test-driven development in SCRUM mode
- *Security Research, Karlsruhe.* Research on Multi-Tenancy support for searchable encrypted databases, Bachelors thesis

2016–today **Master Scholarship Student, SAP SE, Karlsruhe.**

Contribution to searchable encrypted database driver, development of a demo for TPC-H queries with searchable encryption on SAP HANA, contribution to TREDISEC, a European collaborative Research Project, research on Intel Secure Guard Extensions (SGX) performance, Masters thesis on secure data sharing with Intel SGX

University Projects and Practical Courses

2015 **Agile Software-Engineering, Practical Course, DHBW.**

Development of the web-based game "doodle breakout" in a team of four students, application of SCRUM mode. [Link to game](#)

2016 **DeSearch, Semester Project, DHBW.**

Setup and implementation of a network of stationary and wearable bluetooth-devices to locate people suffering from dementia. [More info](#)

2016 **Multi-core programming: tools, models, languages, Practical Course, KIT.**

Development and optimization of a highly parallel ray-tracer

2017 **General-purpose computation on GPUs, Practical Course, KIT.**

Optimization of computing tasks (parallel reduction, image filtering, physics simulations) using OpenCL and CUDA

Skills and Competencies

Languages German (native speaker)

English

Basic French

Programming Java, C++, ABAP OO, SQL, JavaScript, bash, python, R

Experience SAP HANA, Intel SGX, Linux, Git, L^AT_EX, Agile Software Engineering, SCRUM, TDD

Interests

Athletic Gymnastics, Track and Field, Skiing, Motorcycling, Cooking