

Lina Hirschoff

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

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|-------------|--|
| 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 ^A T _E X, Agile Software Engineering, SCRUM, TDD |

Interests

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