Franziska Vollmer
Master Student in Computer Science

PROFIL

I am an open-minded and sociable person with a passion for exploring new topics, particularly in the fields of technology and science. I enjoy reading, listening to music, and spending time in nature. My academic journey has provided me with hands-on experience in various programming projects and group assignments, where I developed strong teamwork and problem-solving skills. Additionally, I have been involved in scientific research projects, further enhancing my analytical abilities.

PERSONAL INFORMATION

Date of Birth: April 18, 2000
Adress: Meißnerstraße 8, Fellbach, 70736, Germany

CONTACT

PHONE:
+49 1511 2320288

WEBSITE:
https://www.linkedin.com/in/franziska-vollmer-643195201
https://franziska-vollmer.github.io/

E-MAIL:
Franziska-vollmer@outlook.com

LANGUAGES

German (Native)
English (Fluent)
French (Intermediate)

EDUCATIONAL BACKGROUND

Technical University of Darmstadt
Master of Science – Computer Science (Expected Graduation: May, 2025)
October 2022 – Present

DHBW Mannheim
Bachelor of Science- Business Informatics
October 2019 – September 2022

Freie Waldorfschule Esslingen
Abitur
September 2006 – July 2019

WORK EXPERIENCE

Technical University of Darmstadt – Student Research Assistant
March 2023 – Present
Contributed to various research projects in the areas of system security and hardware security, gaining valuable insights into advanced security practices and enhancing technical research skills.

Technical University of Darmstadt – Teaching Assistant (Operating Systems)
October 2023 – April 2024
Tutor for the course Operating Systems. Provi81ded support to students in the Operating Systems course, assisted with the preparation of course materials, and facilitated student understanding of key concepts.

Technical University of Darmstadt – Teaching Assistant (Embedded System Security)
May 2024 – September 2024
Primarily responsible for preparing course content and conducting tutorial sessions to support students in understanding embedded system security concepts. Assisted in practical lab exercises and clarified complex topics.

KPMG Working Student
October 2022 – March 2023
Supported security consulting for key accounts, contributing to the implementation of regulatory standards and improving security protocols.

Oberlandesgericht Stuttgart Internship
October 2019 – September 2022
Worked as a student assistant in the technical department, focusing on the security aspects of court applications, and assisting in the enhancement of digital security measures.

SKILLS

- Knowlege in:
  - Hardware Security
  - System Security
  - Satellite Security
  - Threat Modeling
  - Vulnerability Analysis
- Technical Skills:
  - Programming Languages: Python, C++, Java
  - Tools and Frameworks: Docker, Kubernetes, Git
  - Operating Systems: Windows, Linux
- Soft Skills:
  - Strong Communication
  - Problem-solving
  - Teamwork
  - Organizational skills

PUBLICATIONS

1. **Md Sadun Haq, Thien Duc Nguyen, Ali Şaman Tosun, Franziska Vollmer, Turgay Korkmaz, and Ahmad-Reza Sadeghi** SoK: A Comprehensive Analysis and Evaluation of Docker Container Attack and Defense Mechanisms. 45th IEEE Symposium on Security and Privacy (S&P), May 20–23, 2024.

2. **David Koisser, Richard Mitev, Nikita Yadav, Franziska Vollmer, and Ahmad-Reza Sadeghi** Orbital Trust and Privacy: SoK on PKI and Location Privacy Challenges in Space Networks. 33rd USENIX Security Symposium, 2024.

3. **Nikita Yadav, Franziska Vollmer, Ahmad-Reza Sadeghi, Georgios Smaragdakis, and Alexios Voulimeneas** Orbital Shield: Rethinking Satellite Security in the Commercial Off-the-Shelf Era. IEEE 2024 Security for Space Systems (3S).

SUMMER SCHOOLS

ACACES 2024 – 20th International Summer School on Advanced Computer Architecture and Compilation for High-Performance Embedded Systems
Fiuggi, Italy
July 14–20, 2024
Participated in this prestigious program organized by the HiPEAC Network, focusing on advanced topics in computer architecture, compiler technology, and high-performance embedded systems. Engaged in intensive coursework and discussions with top researchers, gaining in-depth knowledge and practical skills in architecture and compilation for embedded systems.

TSS Spring School – In Conjunction with the 29th IEEE European Test Symposium
The Hague, Netherlands
May 17–20, 2024
Attended the TSS Spring School, dedicated to hardware security in partnership with the IEEE European Test Symposium. Covered critical topics in hardware vulnerability analysis and secure system design, enhancing my understanding of hardware security measures through practical workshops and expert lectures.

REFERENCES

Prof. Dr. Peter Buxmann
Chair of Information Systems, Technical University of Darmstadt

Prof. Dr. Mariami Gachechiladze
Professor of Computer Science, Technical University of Darmstadt

Prof. Dr. Iryna Gurevych
Professor of Computer Science, Technical University of Darmstadt