# Johannes Hirt B. Sc.

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https://johanneshirtportfolio.netlify.app/#home

## Education

**Technical University of Applied Sciences Ulm**  Ulm, Germany
*M. Eng. in Systems Engineering and Management - Electrical Engineering*  2025 - 2026
*(expected)*

**The Virginia Polytechnic Institute and State University,**  Blacksburg, USA
*Fulbright scholarship for a course in Leaders in Entrepreneurship*  2024 - 2024

**Northumbria University**  Newcastle Upon Tyne, England
*Exchange student*  2022 - 2022
- Grade: 1,0
- Took computer science related classes

**University of Applied Sciences Heilbronn**  Heilbronn, Germany
*B. Sc. in Software Engineering*  2021 - 2025
- Grade: 1,3
- Specialized in Embedded Systems and Integrated Sensors

## Projects

**Research project focuses on finding a new machine learning algorithm to classify data sets based on the electric potential.**
*University Applied Sciences Heilbronn*  2024.03 - 2024.07

**Embedded systems project for a 3D scanner using a LiDAR sensor.**
*University of Applied Sciences Heilbronn*  2024.03 - 2024.07

**LoRa-based system for presence detection in university learning areas.**
*University Applied Sciences Heilbronn*  2023.09 - 2024.02

**Portfolio Website**
*Own project*  2025.07 - 2025.08

## Experience

**Eviyo GbR** | Remote  2024.09 - 2024.11
- Development of a website for bookable leisure acitvities in the region of Heilbronn.
- Created a dynamic, modern, and user-friendly website using a full-stack approach within a small team.
- Implemented features for user authentication, booking management, and secure payment processing.
- Utilized technologies such as React.js for the frontend.

**Diehl Defence** | Überlingen, Germany  2023.03 - 2023.08
- Development of a version control program for the Nexus repository, designed to retrieve and display information clearly. The project involved creating a user-friendly application using Java with JavaFX and storing data locally in a SQLite database
- Creation of a calculation tool to assist a test department colleague with software verification for the GUARDION drone defense project. Written in python, the work involved significant time to understand the undocumented codebase and focused on improving the graphical user interface and validating user input.
- Implementation of a graphical user interface for a Python console application that generates Word documents from HTML files.
- Exploration of hardware-oriented programming, including working with FPGA boards (Basys 3) and learning the Vivado IDE and the Verilog programming language.

**University of Applied Sciences Heilbronn** | Heilbronn, Germany  2021.09 - 2024.07
- Mentoring undergraduate students in design thinking and work techniques.

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| AWARDS AND HONORS | • **Fulbright Scholarship**, Summer course at Virginia Tech | 2025.08 |
| | • **Company Scholarship**, Bechtle AG | 2023.09 |
| | • **Company Scholarship**, Vektor Informatik GmbH, | 2022.09 |

**SKILLS**

**Languages**: German (C2), English (C1), French (B1).

**Programming**: `Python`, `C`, `MATLAB`, `Java`, `JavaScript`.

**LEADERSHIP & ACTIVITIES**

**SV Großschönach** | Großschönach, Germany                    2001.07 - Today
- Playing amateur football for our local team.
- Organizing events and work assignments throughout the year.
- Assisting friends with activities for kids during the summer break.