NICO BÖCKHOFF

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Teufel Lautsprecher GmbH / Berlin

Embedded Software Engineer - Innovation & Development   since 02/2023

- Ownership of the firmware of one product that was successfully brought to mass-production phase.
- Embedded Software Development in C & C++ using FreeRTOS.

Electronics Engineer - Innovation & Development   05/2021 - 02/2023

- Embedded software development with PlatformIO and STM32CubeIDE and electronics design in Altium for products in pre-development.
- Collaborating across multiple teams (embedded, electronics, UX, acoustic) to validate features and explore concepts for upcoming products by building hardware and software prototypes.
- Planning and commissioning of new prototyping lab in new office space for products in pre-development.

Human Computer Interaction Lab / Hasso-Plattner-Institute, Potsdam

Research Assistant   12/2019 – 06/2020

- Designed and developed a portable 6DOF haptic gaming console for blind people.
- Designed the electronics including: part selection, BOM, schematic capture and PCB routing in KiCad.
- Developed C++ firmware (motor control and SPI communication interface for precision encoders).
- Led a team of students to produce 10 devices to be used for teaching undergraduates. Devices still in use 2023.
- Gave a lecture to bachelor students about PCB Design.

Freigeist Lab / Berlin

Embedded Systems Engineer   10/2018 – 03/2019

- Developed an embedded IoT framework in C++ for a hardware toolkit to communicate with a Python server (REST).
- Designed electronics for a custom hardware toolkit including IoT sensors and actuators based on the ESP8266.

HackHPI / Hasso-Plattner-Institute, Potsdam

Founder & Main Organizer   2015 – 2019

- Founded and organized a yearly hackathon with close to 100 attendees funded by IBM, SAP, Wikidata and others with topics including sustainability, machine learning and health.
- Led the organizer team, coordinated volunteers and communicated with partners & participants.
- Developed the concept, raised sponsorship money (8k first year, 20k second year) and managed the budget.

Education

Hasso-Plattner-Institute, Potsdam   #1 Comp. Science M. Sc program in germany according to CHE 2021/2022

- **M. Sc. IT-Systems Engineering (final grade: 1.2, with distinction)**   **04/2018 – 10/2021**
- **Design Thinking Basic Track**, link   **10/2017 – 03/2018**
- **B. Sc. IT-Systems Engineering**   **10/2014 – 08/2017**

Indian Springs School, Alabama, US

- **High School Diploma**   **10/2011 - 08/2012**

Community Engagement

Student Club Leader - Club Connect(2016-2017): Led a 30-person student club dedicated to connecting students to potential employees through organizing dozens of events including career fairs, exchanges & other events. Awarded best student-club of the year (2017) award under my leadership.

Skills

- Software engineering (c, c++, python, javascript)
- Designing Schematics and PCBs with Altium, KiCad
- Embedded systems, microcontrollers and sensors
- Project management & Design thinking
- Oscilloscopes, logic analyzers, reflow-soldering

- Communication Protocols (SPI, I2C, USB, USB PD, BLE, UART, DMX)
- Lasercutters, FDM/SLA printers and CNCs
- 3D-modeling using Autodesk Fusion360
- 8 years experience using Linux and git