NICO BÖCKHOFF

+4915772016846
nico.boeckhoff@gmail.com
linkedin.com/in/boeckhoff/
github.com/boeckhoff
boeckhoff.eu

Teufel Lautsprecher GmbH / Berlin

Electronics Engineer - Innovation & Development **since 02/2022**

- Established new prototyping lab in new office space for products in pre-development.
- Planning and commissioning of lab including layout, choice of fabrication tools, coordination with architect etc.
- Collaborating across teams (embedded, electronics, UX, acoustic) to create prototypes and validate features and explore concepts for upcoming products.

Electronics Engineer - Innovation & Development (working student) **05/2021 – 02/2022**

- Designed and developed 2 electronic systems, one upcoming product prototype and one system for in-house use.
- My activities included schematic & PCB design in Altium, embedded programming, 3d modelling.

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 the effort to produce 10 devices to be used for teaching undergraduates. Devices still in use 2022.
- Gave a lecture to bachelor students about PCB Design.

HackHPI / Hasso-Plattner-Institute, Potsdam

Founder & Main Organizer **2015 – 2019**

- Founded and organized a yearly hackathon funded by IBM, SAP, Wikidata and others with topics including machine learning, health and sustainability.
- 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.
- Handed over the project after two years and stayed on team as advisor

Freigeist Lab / Berlin

Embedded Systems Engineer, Hardware Engineer **10/2018 – 03/2019**

- Developed an embedded IoT framework in c++ for a hardware toolkit to communicate with a Python server.
- Designed the electronics, including: part selection, BOM, schematic capture and PCB routing in KiCad for a custom hardware toolkit including IOT sensors and actuators based on the ESP8266.

Education

Hasso-Plattner-Institute, Potsdam

- **M. Sc. IT-Systems Engineering (final grade: 1.2)** **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

- Project management & Design thinking
- Software engineering (c, c++, python, javascript)
- Designing Schematics and PCBs with Altium, KiCad
- Embedded systems, microcontrollers and sensors
- 3D-modeling using Autodesk Fusion360
- Communication Protocols (SPI, I2C, USB PD, BLE, UART, DMX, USB PD)
- Oscilloscopes, logic analyzers, reflow-soldering
- Lasercutters, FDM/SLA printers and CNCs
- 5 years experience using Linux and git