



Martin Hundebøll

Linux developer
Embedded developer

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Summary

Versatile Linux developer with experience in embedded platforms.

Languages

Danish ●●●●●●
 English ●●●●●●
 German ●●●●●●

Competencies

C, C++, Rust, Python, Bash
 Linux kernel, U-Boot
 Yocto/OE
 TCP/IP, IEEE 802.11, Mesh
 Git, Buildbot

Social Network

LinkedIn profile
 Github profile
 GitLab profile

Projects

- 2023 – **Embedded Linux Developer** Connected Cars A/S
Upgrade existing BSP components such as Yocto, Linux, and U-Boot. Integrate new hardware features in existing BSP.
- 2024 **Linux and Embedded Developer** TEMCompany ApS
Implement asynchronous multiprocessing support with Linux and bare metal processes on a Xilinx Zynq 7000 SoC.
- 2023 **Linux Architect** Videndum Production Solutions Inc.
Implement graphical browser support in Buildroot BSP, and integrate existing business application in up-to-date Buildroot.
- 2023 **Linux Consultant** Blue World Technologies ApS
Review, optimization, and stabilization of existing Linux BSP.
- 2023 **Linux Developer** RTX A/S
Integrate new SoC support in existing Yocto BSP, including secure and verified boot with U-Boot, Arm Trusted Firmware, OP-TEE, and Linux.
- 2021 – 2022 **Linux Architect** Military Surveillance Systems
Upgrade and hardening of existing Linux BSP with focus on integration of the full system. Design and development of secure and verified boot, REST API service, cryptographically verified authentication.
- 2020 – 2021 **Linux Developer** Silicom Denmark A/S
Kernel driver development and backporting. Product test development with pytest.
- 2020 **Rust developer** r2pTracking ApS
Service development in Rust on embedded Linux devices.
- 2019 **Embedded Linux Developer** Universal Robots A/S
Linux BSP development for x86 platform using Yocto / OpenEmbedded.
- 2019 **Embedded Linux Developer** Kamstrup A/S
Driver and application development for embedded BSP, including C for U-Boot and Linux, and C++ for application.
- 2019 **Embedded Developer** DEIF A/S
Bootloader and driver development and integration on in-house RTOS.
- 2018 – 2020 **Embedded Linux Architect** Connected Cars A/S
Linux BSP design and development using Yocto / OE. Delta update system design and implementation. Hardware abstraction layer design and development in Rust. Linux BSP stabilization and maintenance with Yocto.
- 2018 **Embedded Developer** DEIF A/S
Driver development and integration on in-house RTOS.
- 2017 – 2018 **Embedded Linux Developer** DEIF A/S
Linux driver development and userspace integration.
- 2017 – 2018 **Embedded Linux Architect** TRIAx A/S
Linux Yocto BSP architect - hardware review, bringup and integration.
- 2017 – 2018 **Embedded Linux Tech Lead** Private surveillance company
Linux BSP development, hardware bring-up and driver development.

- 2016 – 2018 **Embedded Linux Developer** RTX A/S
Linux BSP development, hardware bring-up and multimedia integration.
- 2016 **Embedded Linux Developer** Johnson Controls
Linux BSP development, hardware bring-up and driver development.
- 2016 **Embedded Linux Developer** Semvac A/S
Linux BSP development, hardware bring-up and driver development.
- 2016 **Embedded Linux Developer** Focon Electronic Systems
Low-end Linux development and system integration.
- 2016 **Embedded Linux Developer** New Nordic Engineering
Linux BSP development, hardware bring-up and driver development.
- 2016 **Embedded Developer** Focon Electronic Systems
Embedded C++ / Qt browser development and system integration.
- 2015 – 2016 **Embedded Linux Developer** Ambu A/S
Linux BSP development, hardware bring-up and driver development.
- 2015 – 2016 **Embedded Developer** RTX A/S
Embedded RTOS development for wireless DECT phones.

Work History

- 2018 – **Embedded Linux Consultant** Geanix ApS, Hadsten
Freelance consultant working with:
 - Linux BSP development using Yocto / OE
 - Embedded microcontroller development
 - Userspace application development for embedded Linux
 - Python development (test frameworks, buildbot, OE, etc.)
- 2015 – 2018 **Embedded Linux Consultant** Prevas A/S, Aarhus
Consultant on both in-house projects and on-site; includes:
 - Multiple Linux platform projects (Yocto/OE)
 - C++ projects with and without GUI (Qt5)
 - C for embedded platforms
 - Python development (test frameworks, buildbot, OE, etc.)
 - Continuous integration for internal projects (Buildbot)
 - Server administration (Ansible)
 - Tech-lead / technical PM on multi-people projects.
- 2011 – 2014 **PhD Student** Aalborg University, Aalborg
Develop and implement network coding protocol for wireless mesh networks. Focus on practical application and evaluation of protocols. Development in both C and C++ in kernel and userspace, respectively. Test and data analysis in Python.
- 2014 **Intern** ABB Tropos Wireless Systems, Sunnyvale
Implement network coding for commercial wireless mesh products. Included C, C++ and network configuration.
- 2010 **Intern** Vestas Wind Systems, Aarhus
Implement prototype of real-time network protocol for turbine controller communications.

Education

2009 – 2011 M.Sc. Networks and Distributed Systems

Aalborg University

2006 – 2009 B.Sc. Computer Engineer

Aalborg University