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Mazunki Hoksaas

Systems Programmer and Linux Specialist

Summary

Software developer with an interest in system's architecture, embedded software, compilers, linguistics, and philosophy.

I'm drawn to the world of free and open source software. I care about making things more accessible, open, and ensuring compliance to standards and ethics

Work Experience

Teacher, Learnist, Remote 2022-present

Teaching kids and adolescents the fundamentals of programming

Maintenance and Mariner, Marine Service A/S, Oslo 2014-2022

Worked on maintenance of boats, ferries, and cargo ships

Ferry Sailor, Oslo-Fergene AS, Oslo 2016-2022

Assisted the captain and passengers aboard a local ferry

Education

2024-present MSc Programming and Systems Architecture, University of Oslo

2021-present BA Philosophy and Linguistics, University of Oslo

2019–2023 BSc Informatics: Robotics and Intelligent Systems, University of Oslo

2018–2019 **Applied Data Science**, *Noroff Education*

Projects

Custom System Services

I build and maintain up my own set of system services using the s6-rc and execline system. This allows me to have a better control, customizability and understanding of the systems I use on a daily basis

Linux Distro I am very used to many Linux distributions, but none of them are ideal to my taste. I am currently working on building my own Linux distro breaking away from the standards of POSIX and the FHS

System

Operating As part of an assignment for a course on kernel building, we built a simple operating system. Throughout the course, we build different pieces over one

- O Setting up a bootloader on MBR-BIOS/legacy system on the IA-32 architecture
- Implement threading scheduling support, using non-preemptive and preemptive approaches
- Supporting virtual memory by using external storage for swapping out pages
- Added a basic file system to the OS similar to FAT

TJ Bot, Home assistant

A project done for the first year of Studio at Noroff University & College by four students, using different APIs together to create a home device / bot. Built from scratch, incorporating various technologies such as Text to Speech, Speech to Text, visualisation, network communication, beyond others; and enhancing all this with a focus on security and privacy aspects

Technical skills

Languages

Programming Proficient in Python, C, and Java, and writing shell scripts that are POSIX compliant

Development

Tools

I pedantically use Git for version control; Vim for editing; tmux, kitty and Sway for multiplexing; and SSH for jumping between different systems

Systems and Platforms

Experienced with virtualization using QEMU, and proficient in managing Linuxbased systems, particularly with non-traditional init systems like s6 instead of systemd. Familiar with the Wayland display protocol, especially wlroots

Volunteering

2019-2020 Language Tutor, Norsk Start, Oslo

I helped foreigners improve their language skills in Norwegian and in English, in order to have a better chance at their goals

2017-present

Technical support

I often help newbies and more experienced people on forums and IRC-like chats track down problems with their systems, mostly Linux-related

2022-present

Package Maintainer

I've been maintaining several packages on Gentoo for a while. This requires working with different build systems, requirements, and expectations

Open Source

Whenever something isn't working as I want in some FOSS/open source software I'm using, I fix it and provide a pull request

Certifications

- 2018 Crowd- and Crisis Management, Redningsselskapet, Oslo
- 2018 Reduced Safety Coruse for seafarers, Redningsselskapet, Oslo
- 2018 Boat Driver License, Sjøfartsdirektoratet