

Lars Halvor Hansen

Student of Engineering & Economics

EDUCATION

NTNU | ELECTRONIC SYSTEM DESIGN & INNOVATION MASTER. SPECIALIZATION IN SPACE SYSTEMS

August 2021 - now | Trondheim

NTNU | ECONOMICS - BACHELOR'S DEGREE

August 2023 - now | Trondheim

EXPERIENCE

SONY SEMICONDUCTOR EUROPE | SUMMER INTERN

June - August 2023 | Lysaker, Oslo

- Built a tool that translates Python- and Yaml-based test code to the UVM framework in SystemVerilog. Automated a time-consuming and manual engineering task, significantly increasing efficiency. Contributed to improved testability and code quality through standardization of the test infrastructure.

DISRUPTIVE TECHNOLOGIES | SUMMER INTERN

June - August 2023 | Lysaker, Oslo

- Disruptive Technologies is a company in sensors and the Internet of Things (IoT). They make sensors with very low power consumption and sensor solutions for businesses around the world.
- Together with two other summer interns, I developed a new version of the sensor hub. It receives data from sensors and sends it to the cloud. This new version uses much less power thanks to the implementation of Nordic's nRF9160 chip and running ZephyrRTOS.

ORBIT NTNU | SYSTEMS ENGINEER & ELECTRICAL ENGINEER

September 2022 - now | Trondheim

- Orbit NTNU is a student organization that builds satellites from start to finish. Orbit has the best environment in Scandinavia for learning the technology and applications within satellite technology.
- I have contributed to the development of our OnBoardComputer; planning and integrating STM32 on a 6-layer circuit board. I have also created a comprehensive power budget for our next satellite, where I prioritize which subsystems to optimize for power efficiency.
- Currently, I coordinate "The Review Process" and oversee the satellite development from idea to design, production & launch.

NTNU | LEARNING ASSISTANT IN INTRO TO ELECTRONICS

August - now 2023 | Trondheim

- NTNU selects some students to work as assistants in their courses. They are available during exercise sessions to help other students who have questions and need assistance.

SHIFTHYPERLOOP | BATTERY SYSTEMS ENGINEER

September 2021 - July 2022 | Trondheim

- Designed, produced, and tested a battery case for a battery system and a battery management system (BMS). The system is several hundred volts and I had to consider electromagnetic forces, BMS requirements, and chassis requirements.

UNGDOMSAKADEMIET | PRIVATE TUTOR

January 2019 - June 2020 | Skøyen, Oslo

- Private tutor in mathematics, science, and english. The students I have helped are now performing measurably better in school. (Link to case study)

SKILLS

CODING AND HDL EXPERIENCE

Experienced:

Python • C++ • SystemVerilog

Familiar with:

C • Rust • JavaScript • ZephyrRTOS
• Assembly • Yaml • Json

SOFTWARE

Experienced:

Altium • KiCAD • Solidworks •
Experienced in graphic design.
halvorhansen.no/art

LANGUAGES

Native language: Norwegian • Highly proficient in English • basic Spanish and basic Japanese

INTERESTS

COMPUTER PROJECT

August 2022 - August 2023

I have always been very curious about how computers work on a fundamental level. Therefore, I made an 8-bit Turing-complete computer using the Von Neumann architecture. halvorhansen.no/hobbies

REFERENCES

Håvard Mellbye, Employer, Disruptive Technologies

✉ havard.mellbye@disruptive-technologies.com

☎ +47 99 32 64 52

Jarle Steinberg, Systems Engineer at ESA, Paris, France

✉ jarle.steinberg@orbitntnu.com

☎ +47 94 13 07 39