



Profile

Master's student in Electrical engineering at NTNU seeking new challenges and learning opportunities. Passionate about creating solutions, building from scratch, and delivering quality work.

Experience

Hardware Developer, MedStorm, Oslo

March 2022 – Present

Tasks: developing and maintaining electronic pain sensors. Tasks include technical documentation, graphic design (Inkscape/adobe), 3D modeling, prototyping, and electronic development using KiCad, Target3001, and Eagle.

Orbit, NTNU, Trondheim

September 2024 – Present

Designing the satellite's On-Board Computer and high-speed FPGA. Responsible for schematic design and PCB layout using Altium, with SPICE simulations for testing and validation.

Event Organizer – KRIK, Oslo/Trondheim

(January 2023 – Present)

Organize summer camps for +700 young adults annually in a 12-person team.

Internship, Vulkaza, Oslo

June 2022 - August 2022

Tasks: software developer and wrote an API customizing 3D models in Python and Blender. I also learned how to 3D model in Fusion 360

Biomedical Research Project, Oslo

September 2022 – June 2023

Developed a pneumatic device to measure oxygen in the heel when out of balance. Prototyped on breadboards and implemented using C programming

Substitute Teacher, Kristelig Gymnasium, Oslo

September 2021 – June 2024

Subjects: Math, Python, Physics, Biology and Science at High School level.

Education

- **MS Electrical Engineering NTNU, Trondheim** (August 2024 – Present)
MELSYS- Direction: Embedded systems.
- **BA Electrical Engineering, OsloMet, Oslo** (August 2021 - June 2024)
Developed an autonomous Trimaran powered by wind and harvesting its own energy from ocean waves for our BA. Project. GPA: 4.5.
- **Hedmarktoppen Folkehøyskole** (August 2020 – June 2021)
- **Kristelig Gymnasium (High school), Oslo** (August 2017 – June 2020)

Certification

- **3D Printing, PCB dev, Vinyl, Lasercutting, Soldering and CNC-Milling**
October 2022 – October 2022
- **QMS Training, Document Control, MedStorm**
January 2017 – March 2020
- **Online course in C, C++, HTML and CCS. Codecademy**
January 2022 – February 2022

Håvard Fredwall

Master's student NTNU
Electrical engineering
Birthdate 12th Dec 2001

Details

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Skills

- Circuit/PCB design
- Altium, KiCad, Eagle, Target3001
- C, Embedded C, C++, Python, VHDL, Verilog, HTML, CSS,
- 3D-modeling in Fusion and Blender,
- AimSpice, LTspice, Cadence
- 3D slicers: Prusa, Bambu, Creality and Cura
- Public Speaking

Hobbies

- Beach-Volleyball on international level
- KRIK
- Content creation
- Playing the guitar/Music Production

Language

Norwegian: ★★★★★
English: ★★★★★

References:

- Vulkaza
- Medstorm