

MARIUS MAINZ ELKJÆR

MSC ELECTRICAL ENGINEERING STUDENT

CONTACT

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Copenhagen, Denmark

LinkedIn

EDUCATION

Study Exchange
HKUST, IC Design Engineering
Sep 2025 – Dec 2025

Master's degree
DTU, Electrical Engineering
(Specializing in IC design)
2024 - Now

Bachelor's degree
DTU, Electrical Engineering
2020 – 2023

Military service
3. Marine squadron, Bornholm
Aug 2018 – Dec 2018

Gymnasium
Roskilde Gymnasium,
Math A, Music A, Physics B
2015 – 2018

SKILLS

Technical Skills:
Embedded Systems, PCB Design, Test Automation, FPGA
Software:
MATLAB, KiCAD, LTSpice, C, C++, Robot Framework, OMNeT++, APx, Xilinx Vivado, Quartus, Cadence, ORFS

PROFESSIONAL OVERVIEW

Electrical engineering student specializing in IC design. Experienced in designing, simulating, and testing electronic systems, with a strong foundation in circuit analysis and hardware-aware software development. Brings four years of experience working in professional engineering teams as student assistant. and a strong interest in startup environments.

WORK EXPERIENCE

Student Assistant
IC Optimize, Kongens Lyngby | Jul 2025 – Now
Analog IC design, software development and testing.

Student Assistant
Pascal A/S, Herlev | Mar 2022 – Jul 2025
In charge of automated audio tests of class D audio amplifiers. Primarily focus in software R&D department with occasional tasks in hardware design and development.

Shop Manager
KiteDanmark, Copenhagen | 2019 – 2022

Car Rental Agent
Avis Budget Group, Copenhagen | May 2017 – Jun 2018

Piccolo
Piccolo Kino Ro's Torv, Roskilde | Sep 2015 – Nov 2016

Professional Projects

- Fully automated audio test setup mainly written in Python.
- PCB design of an automated GPIO testing circuit.
- Autonomous integration of digital blocks in Cadence with use of OpenROAD Flow Scripts with a closed PDK for DTU.
- Frontend SKILL GUI for Virtuoso.
- Result viewer application for IC Optimize OPUS.

Personal Projects

- Automated liquid container with dc motors, internal timer, sensors and trigger mechanism.
- Engagement feedback circuit with LCD display and cloud control.
- Bachelor thesis: "Protection Algorithms for Loudspeakers": Investigation of dynamic filters for mechanical and thermal protection of loudspeakers using DSP.