



NÜWIEL

THESIS / RESEARCH WORK / PROJEKTARBEIT

NÜWIEL is an award-winning Hamburg based start-up developing electric transportation solutions for last mile logistics.

NÜWIEL vision is to improve air quality in big cities and reduce negative impact of traffic emissions on cities, environment and public health by providing an alternative mobility: intelligent electric bike trailers.

We are looking for a technically savvy, motivated and enthusiastic student for a thesis, research work or project work in the field of **power electronics**.

YOUR MISSION:

Our trailer's motor is driven by our own motor controller circuit. That circuit has a significant impact on the performance and reliability of our system. For helping us to get ready for the **next generation of motor drivers**, you would:

- Evaluate smart gate drivers with enhanced performance, safety and reliability
- Evaluate different circuits for high-power motor control
- Implement the motor drive circuit on the schematic level
- Design and build a high-power PCB for testing your concepts
- Detailed lab analysis of your prototype, testing the switching behavior, power efficiency and thermal characteristics of your board
- Optional: Optimize existing embedded code for motor control

YOU BRING:

- Background in Electrical Engineering or related
- Prior experience with power electronics, especially power semiconductor switching
- Prior knowledge of PCB software, preferably Altium Designer
- Preferably hands-on lab experience (eg oscilloscope, fine-pitch soldering)
- Solid English skills
- Optional: embedded C skills

WE OFFER:

- Immense learning and a start-up experience
- International, supportive and friendly team
- Direct contribution to the product development
- Room for creativity, own ideas and exploration
- Table tennis, team lunches and free goodies

We will move to a new office in Barmbek near U-Bahn Hamburger Straße in September.

Interested? Send an email to Lorenz: hopfmueller@nuwiel.de.

NÜWIEL GmbH

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Geschäftsführung

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