Universität Stuttgart
Institut für Robuste
Leistungshalbleitersysteme

M.Sc. Swapnil Sunil Roge
Room 1.443, Pfaffenwaldring 47
70569 Stuttgart
swapnil-sunil.roge@ilh.uni-stuttgart.de

10.05.2024

HIWI

PE

Inverter Circuit Development

Description:

As a HIWI, you will be responsible for various tasks related to the development of supporting circuitry for inverters with half-bridge, full-bridge and B6-bridge topologies.

Responsibilities:

- Designing PCBs for inverter circuits, such as gate driver PCBs for half-bridge, full-bridge and B6-bridge inverters.
- Performing soldering of SMD and through-hole components on PCBs with precision and accuracy.
- Performing tests on the developed circuits.

Required Skills:

- Experience in developing inverter circuits.
- Proficiency in High-Voltage PCB design using Altium Software.
- Experience in soldering PCBs.
- Ability to perform voltage and current measurements on a high-voltage setup.

Optional/Preferred Skills:

- Experience of using stencil printer, pick & place machine and reflow oven for PCB soldering.
- Knowledge of control systems related to inverter operations.
- Familiarity with MATLAB and Simulink.

HIWI Contract Information:

- 40 hours per month