Master Thesis

Electronic laser driver for high accuracy gas measurement

The work of this project is to reduce the size of the laser driver so that to make the CO₂/CH₄ measurement system compact and portable. The driver contains a TEC controller and a current driver. This project requires multidisciplinary knowledge on electronic design. The tasks will include:

1) **Design & test**: we have a foundational board but need to be simplified and redesigned;
2) **Implementation**: order the devices and build the PCB board;
3) **Experiment**: measure the CO₂/CH₄ concentration in the air.

Students who have background in electrical/computer engineering and are good at PCB designing are preferable. A master thesis can cover the whole project or focus on a part of it.

**For inquiries, please contact**
Lijuan Lan, lijuan.lan@tum.de
Prof. Jia Chen, jia.chen@tum.de