Interdisciplinary Project (IDP)

**Bachelor / Master Thesis / IDP / Forschungspraxis (m/f/d)**

**LiDAR Data Processing**

**Your role:**

Our LiDAR Sensor is already one of the best in the world and produces great 3D data. But in addition to great hardware, we also build software for processing that data. Help our Object Recognition Lab create software that converts point clouds into higher information. The listed topics are examples of tasks but since we are moving fast new ideas always come up. Just apply and mention your interests and background and we’ll discuss suitable topics with you in detail.

**Example areas (relevant technologies in brackets)**

- 3D SLAM on our LiDAR data (SLAM, IMU, ROS)
- Detection of moving objects /people with a moving 3D LiDAR (ROS, PCL)
- Build an IOT Cloud for 3D LiDAR data processing (IOT Frameworks, ROS)
- Reliably find markers in 3D LiDAR data (ROS, PCL)
- Implementation of realtime point cloud processing in embedded systems (ARM Cortex, ROS, Linux)
- Object classification of 3D LiDAR data
- Create a web based visualization for ROS LiDAR data (JavaScript, ROS)
- Create a LiDAR data showcase with Web technology (Javascript)

**Skills:**

- You are currently studying computer science or electrical engineering (or similar)
- You have relevant programming skills in C++
- Experience with Linux
- Experience with LiDAR point cloud processing is great (but rare)
- Experience with ROS is great (but rare)
- You have very good communication skills in English or German

**Team:**

You will be working in a very dedicated and highly motivated team of experts from the field of optical sensors, robotic engineering, and software engineering.

**Details:**

If you want to join our team, please send your current CV with your performance record (in English or German) to career@blickfeld.com.