

# Bachelor/Master Thesis

at the Machine Learning and Data Analytics Lab  
in cooperation with



February 2019

## Artificial Intelligence (AI) for a Smart Home

In this project, radar and time of flight measurements should be implemented to capture distances of moving objects with commercially available sensors.

The required hardware should be purchased in form of starter kits. Experiments should then be conducted with different objects regarding:

- measured signals
- direction of motion
- velocity of motion
- course of the signals during motion
- influence of the surrounding environment

Afterwards, these patterns are going to be classified, which should be exemplarily implemented in a C program. In an evaluation step the classification will be tested with living objects in real-time.

This thesis project is in cooperation with Enertex Bayern GmbH, Forchheim:

<https://www.enertex.de/>

Start date: now, flexible

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