

Forschungspraxis, Interdisciplinary Project, Master's Thesis

# Wearable embedded AI camera for Human Activity Understanding

Under this topic, the student should build and evaluate an egocentric camera setup for human activity understanding.

- Understand the requirements for capturing human activity efficiently and effectively (camera requirements, AI compute requirements, wearability, user friendliness).
- Review existing solutions (e.g. GoPro).
- Survey camera modules and suitable embedded sensor+AI platforms (Raspberry Pi / Nvidia Jetson / Intel neural compute sticks / better alternatives).
- Design the best possible setup and evaluate it for predicting a set of daily-life human activities.

## Prerequisites

- Experience integrating sensor modules and compute platforms
- Experience/interest in Computer Vision, Machine Learning, Deep Learning
- Experience in Linux, Python, C++

## Contact

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## Advisors

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