

Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich



Prof. R. Wattenhofer

## Do You Even Lift?

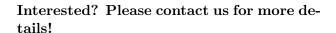
## Motivation and Informal Description

When you learn a new type of sport, it is vital that you do it correctly. If you get the in the habit of doing a movement incorrectly, this will be very hard to unlearn. It will hinder your progress later on and it might even lead to injuries. That is why there are coaches. They show you how to move and give you feedback. Unfortunately, most are neither free nor perfect nor always available. And unless they are the world's elite, they still might miss some subtleties.

Wouldn't it be a great to have a personal trainer whenever you need him. Always available, all knowing, and basically for free. Remembering your progress and thus incentivizing you to push yourself to the limit. We want you to use a Kinect to analyze your movements and give feedback. Using its depth sensors, we can achieve exactly this. Due to its inherent objectivity, this can be used to gamify everything!

## Requirements

Good programming skills and some basic knowledge graph theory could be of great help. The student(s) should be able to work independently on this topic!



## Contact

- Philipp Brandes: philipp.brandes@tik.ee.ethz.ch, ETZ G94
- Laura Peer: laura.peer@tik.ee.ethz.ch, ETZ G64.1

