



Digital Personal Trainer

In recent years, a large number of new devices and applications have changed how people exercise today. Many people listen to music while exercising to stay motivated. Others like tracking their progress using GPS or step counting devices. In endurance training, heart rate monitors can be used to avoid training too intensively and therefore even help improve the effect of each training session. However, none of these devices can replace a personal trainer who can keep a close eye on you and tell you exactly how to improve your training session. Of course having a person telling you how to train also has a positive effect on your motivation as well.

We believe that existing solutions to improve exercising are unable to replace a personal trainer because the focus usually lies on only one of the many aspects of an effective exercise session. We have a few ideas that could transform a common smartphone into a better personal training device that could overcome most of the shortcomings you can find in existing solutions. The goal of this thesis is to use a smartphone to properly motivate a user, measure training intensity and track/avoid training mistakes all at once. This goal should be achieved using as little external hardware as possible and in a way that it is applicable to many endurance sports without changes.



By Chris Hunkeler
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Requirements: Good programming skills (preferably in Java) are required. Some creativity and experience in Android programming are advantageous. The student(s) should be able to work independently on this topic.

Interested? Come to our office for coffee and a small chat or contact us by email/phone.

Contact

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