INTERDISCIPLINARY PROJECT (IDP)  
SOLOS Mirrors  
Creating and expanding a motion tracking application for sport and rehabilitation

Background:

Our vision is to enhance the workout experience and the way you look into the mirror. We are developing an interactive smart mirror, which provides you with an unparalleled access to health and sports management. SOLOS is a compound system, which detects and analyses every single body movement in real-time. This way, it can give beginners as well as professionals the possibility to track and manage their workout effortlessly. Founded by TUM students, we participate in the TechFounders accelerator program and run pilot projects with industry partners. We are looking for highly motivated students and teams to support us as a part of an IDP project.

Goals:

Our long-term goal is to improve our algorithms, so that we can offer a more fluid, proficient and enjoyable experience for our users. Customers should be given a live overview of their progress from the workout, their condition and additional suggestions. The difficulty is to build a robust architecture to cope with the large amount of received data from the different body stances.

For this we are looking for highly motivated students to support us developing the system, which is able to calculate boundless amount of data, and all that in a simple device.
Possible tasks:

- Implement basic motion tracking solutions and integrate them with our system; Work on state-of-the-art motion tracking algorithms
- Develop a set of constraints and rules for body motions in collaboration with sports scientists
- Document the benefits of different solutions
- Find the limits of today's motion tracking technology and research different approaches to resolve problems

Approach:

The project should occur as an agile software development based on Scrum, which we apply for managing product development iteratively. To reach our common goals, we challenge assumptions of the traditional, sequential approach of product development. We encourage daily face-to-face communication among all team members involved, in order to enable teams to self-organize and define flexible work strategies.

Requirements:

- C#, Java or C/C++
- Experience with motion tracking software (Optional, but a plus)
- Good English or German skills
- Startup mindset (Flexibility and reliability)
- Team or Individual applications are possible
- Earliest starting date: 27.03.17

Application:

By joining us, you can get a better look into the exciting world of the Munich Startup Scene. You'll have the chance to meet and connect with great entrepreneurs, mentors and enthusiasts.

In case this has piqued your curiosity, please contact us and send your documents.

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