



# Come Fly with Me Design of VR Flying Simulation for Real Flying Humans and Investigation of its Potential use to Assess Balance Disorders

Project Management and Software Development for Medical Applications

### **General Info**

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### **Project Abstract**

Flying is fun. While humans typically don't fly by nature, they can when skydiving or body flying.

This project aims to investigate VR/AR simulations for flying humans and their potential use to investigate and research balance disorders.



Source: https://www.jochenschweizer.de/arena/bodyflyingmuenchen,default,pd.html

# **Background and Motivation**

Flying involves some of the most fine-grained movements and an especially challenging balance control, thus motor control of the body. Therefore, it may (or may not) be a useful point for investigation of balance disorders.

# **Tasks Description**

The task for this project is to develop a virtual or augmented reality simulation for flying humans. Literature research should be conducted with regards to what benefits could arise from such implementations.

# **Technical Prerequisites**

Knowledge of or strong interest in C# and Unity3D, Virtual/Augmented Reality and Tracking Systems are required (potential C++ integrations are possible). Students that take this project should not fear heights or flying.

### References

So far there is no related literature.