

## Internship/Master Thesis: Visualization in Virtual Reality Environment

### Job description

For a new research project in the field of physical rehabilitation, VECURY-Digital Motor Rehabilitation Project, supported by the Ministry of Economic Affairs, Innovation, Digitalization and Energy of the State NRW, Germany.

We investigate how virtual reality (VR), in combination with 3D motion tracking, can support patients and therapists during physical rehabilitation. The approach focuses on providing patients with individualized guidance during exercise routines while allowing therapists to design customizable training plans and receive objective data on the recovery progress. We develop an innovative VR platform designed for the use of patients with musculoskeletal disorders of the upper-limbs. The project will be carried out in close cooperation of major medical institutes in the area.

You are expected to design and visualize engaging and natural VR environments as well as user-friendly interface of the VR platform. This involves designing and visualization of the avatar interacting with the users, the visual feedback and the data presented. Moreover, you are expected to engage in the product mockup and prototyping processes. The project is carried out part-time with flexible weekly working hours.

### Profile

- Interest and first experience in graphic design, user experience design, and visualization in VR, game design/development.
- Basic understanding in graphic design, computer graphics and familiarity with VR fundamentals.
- Experience in modelling and creating VR environments as well as user experience design is a plus.

### Research Group

Neurocognition and Action – Biomechanics

### For more information about VECURY

[https://www.uni-bielefeld.de/sport/arbeitsbereiche/ab\\_ii/research/vecury.html](https://www.uni-bielefeld.de/sport/arbeitsbereiche/ab_ii/research/vecury.html)

<https://vecury.com/>

### Place

Bielefeld, Germany

### Starting date

To be agreed

### Duration

According to study regulations, interns are encouraged to stay with us for at least 3 months. Flexible working time. Internship + Master Thesis is possible and preferred.

### Application

Please send an email (including CV) to [alessio.daquino@uni-bielefeld.de](mailto:alessio.daquino@uni-bielefeld.de)