

Junior Software Developer

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.

We are looking for students with background in informatics, biomedical sciences, physics, movement science, 3D and video games design or related fields to contribute in the technology behind VECURY. We are offering a range of topics which include but are not limited to artificial intelligence for data classification, motion tracking algorithms, 3D design and development of visualization frameworks, video games design, virtual reality interactions and environment development.

You will have access to state-of-the-art hardware and technologies, which include latest generation tracking sensors, and VR headsets. The developed work will provide insight into the performance behaviour of users interacting in HMD environments. Focusing on the Unity game engine, scenes for benchmarking the performance will be implemented. The benchmarks will be the measures for a setup based on the HTC VIVE PRO at Bielefeld University.

Profile

Technical

- Good mathematical foundations and knowledge
- Basic experience in computer graphics and VR fundamentals or 3D design tools
- Good working language of C# or any equivalent language programming

Personal

- Passion for medical technology applications
- Teamworker and capable of working in a fast-paced environment
- Problem-solver and creative
- Motivated to make a difference

For more information about VECURY

<https://vecury.com/>

Place

Bielefeld, Germany

Starting Date and Duration

To be agreed

Contact

Get in touch with us (including CV) at info@vecury.com