

Wheel-Sim, the project for the **first** simulator for people in wheelchairs



Establishment of the project

Inspiration

My stepmother lives with primary lateral sclerosis and utilizes a wheelchair. Since her diagnosis, I have observed firsthand the significant limitations in mobility and opportunities faced by individuals in wheelchairs. I have witnessed how, despite her unwavering courage and positive outlook on life, she is unable to partake in many experiences that others often take for granted.

That profoundly moved me and simultaneously inspired me. With the VR wheelchair simulator, I aim to develop a means for wheelchair users to discover new realms without being constrained by their physical limitations. It should provide an opportunity to share experiences, embark on adventures, and experience freedom—elements that are often denied to many in daily life.



The experience of wheelchair users

Regrettably, there remain insufficient opportunities for individuals with limited mobility to engage in thrilling experiences. For instance, amusement parks frequently lack barrier-free design, rendering most rides inaccessible to wheelchair users. Attractions like roller coasters, virtual reality experiences, and themed rides are, in most instances, neither suitable nor safe for individuals in wheelchairs.

Here are several illustrations:

Amusement parks: In the majority of roller coasters, water rides, or carousels, participation in a wheelchair is not feasible.

Trade fairs and exhibitions: Interactive installations and attractions showcased at trade fairs frequently lack accessibility for individuals with mobility limitations.

Simulation attractions: Racing simulators, flight simulations, or virtual reality games are typically designed for users who are standing or walking.

Destinations: Natural experiences, including mountain peaks, cable cars, safaris, and beaches, are frequently challenging to access or necessitate mobility aids that are difficult to arrange in practice.



THE INITIATIVE

Our objective is to develop a simulator that individuals in wheelchairs can directly engage with, utilizing innovative technologies to offer them novel and exhilarating experiences, as well as access to activities that are otherwise unattainable in real life.

The VR wheelchair simulator is crafted to dismantle physical barriers while simultaneously unlocking virtual avenues to adventures and experiences that once appeared unreachable. By employing virtual reality (VR) and advanced motion technology, individuals in wheelchairs can immerse themselves in worlds where they can engage in activities that are challenging or unfeasible to access in the physical realm. Through the VR simulator, we craft experiences that transcend the boundaries of reality—be it a roller coaster ride in an amusement park, a virtual expedition through unreachable natural landscapes, or the exhilaration of a car race. These experiences can be provided in diverse venues, including theme parks, museums, rehabilitation centers, or events—wherever individuals seek novel forms of entertainment and exploration.

Thanks to the simulator, it is also accessible for individuals with mobility challenges:



Virtual roller coasters and theme park rides

Our simulator offers people in wheelchairs roller coasters from all over the world, virtually with a motion simulation.



Virtual trips to exotic places

360° images from around the world allow people in wheelchairs to explore the globe on site.



Virtual nature experiences and adventures

Fly with a paraglider, paddle through wild rivers or explore the ocean – all without physical obstacles.



Interactive adventures and virtual games

Driving a racing car or motorcycle, virtually with a motion simulation, is now possible for everyone.

REASONS TO SUPPORT OUR PROJECT



Dismantling obstacles

- **Accessibility:** Developing experiences that are typically unattainable for wheelchair users.
- **Freedom:** Significantly enhancing the mobility of individuals who use wheelchairs.

Facilitating emotional experiences

- **Embrace the adventure:** Engage in exhilarating experiences and discoveries in a virtual realm.
- **Enhance quality of life:** Foster a positive influence on the well-being and self-esteem of individuals.

Foster Inclusivity

- **Shared experiences:** Individuals who use wheelchairs and those who do not can engage in shared experiences.
- **Equal opportunities:** Provide all individuals with equitable access.

Harnessing Technological Innovation

- **Immersive technologies:** Integrate virtual reality and motion technology to produce authentic experiences.
- **Engaging in groundbreaking efforts:** creating an entirely new realm of experience for individuals with mobility limitations.

WHY WE NEED YOUR SUPPORT

The development of the VR wheelchair simulator requires significant financial resources to implement the technology at the highest level and make it accessible to as many people as possible. The costs of constructing a bespoke platform, integrating realistic motion technologies and developing the software are high. Added to this are the salaries of our team that drives the development over a year, as well as marketing to publicise the project and storage of the equipment.

Your support will help us achieve these important milestones and create an innovative experience for wheelchair users that opens up new worlds for them.

With your help we can break down barriers and make the project a reality!

What	Description	Cost
material for the construction of the platform	Materials such as steel, aluminum, wood, sensors, etc.	5,000 CHF
movement unit of the simulator	Mechanical components (servo motors, actuators, hydraulics)	45,000 CHF
Wages for 2 employees (1 year)	Average annual salary: 80,000 CHF per employee.	160,000 CHF
Software Development for Movement	Development of the control for the motion unit and VR integration	25,000 CHF
marketing costs	Advertising, website, social media, events, presentations	60,000 CHF
storage costs	Storage area for materials, equipment and finished platforms	25,000 CHF
PC (for VR software and simulation operation)	high-performance PC (VR-ready)	5,000 CHF

To start the project, we need a total of CHF 300,000.

HOW CAN I SUPPORT THE PROJECT?

Together we can make the world a little more accessible and more enjoyable for wheelchair users. Whether as a private individual, company or institution - every support helps us to develop the VR wheelchair simulator and provide those affected with unique experiences. Here are the ways you can support us:



Donate as a private individual



Sponsor as a company



Promote as an organization

Small contributions, big impact

Every amount helps us to reach our goal. Support us with a one-time donation or become a regular sponsor. Your donation goes directly to the development of the VR wheelchair simulator and to unforgettable experiences for people with mobility restrictions.

Become a partner for innovation and inclusion

As a company, show your commitment and support a unique project that combines technology and accessibility. With your support, we can build simulators and develop innovative experiences. Your brand and logo will be visible and you will be perceived as a partner of an inclusive project.

Enabling Sustainable Change

As a foundation or institution, you can help to enrich the lives of wheelchair users in the long term. Support us with financial resources, funding programs or through networks and expertise.

THANK YOU VERY MUCH FOR YOUR SUPPORT

Donate conveniently online:

All information at: wheel-sim.com/spenden



Sponsoring:

All information at: wheel-sim.com/spenden

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Zusatztliche Informationen
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