

PHYSICAL E-SPORTS MAKEATHON – MAKE SPORT PLAYFUL AND PLAY SPORTFUL!

TEAMS AND THEMES

This five-day global endeavor, our Makeathon, aims to create the future of sports, health, and happiness.

And you – yes you! – can still join the Makeathon!

If you are unsure where you fit in, see a short description of the available teams below. A short reminder beforehand: Even if the team leaders are looking for specific expertise, you are also very welcome if you bring a different expertise!

POWERPLAY: WORLD OF TRUEKRAFT

Led by Fozzy, innovator-in-chief at Innovationsmanufaktur, this team will repurpose everyday objects into gym equipment and make strength training into a game with the help of virtual reality: Complex yet playful exercise challenges will offer a bridge between sports and gaming. As they include objects such as a hammer, a bottle of water or a sofa, they will be independent from the availability of specific training devices. It will thus be useful in home, office, and travel settings; especially valuable in times of lock-down.

Everybody is welcome to join, but especially if you have expertise in Video capture, business strategy.

MUSIC LIBRARY FOR SPORTS GAMING PURPOSES

Bringing music, movement and sports together, especially when working remotely, is essential to staying fit. World-class pianist Cornelius Claudio Kreuzsch and his team will use the Makeathon to start identifying the specific use cases for music use for sports gaming purposes, defining the legal rights and licensing framework for such music use, and last but not least creating a Music Content Library for sports gaming purposes.

The team is especially looking for music producers and music lawyers to complement their expertise.



MODULARIZING CLOUD-BASED INFRASTRUCTURE TO PROVIDE FOR DIVERSE FORCE FEEDBACK GAME APPLICATIONS

Physical e-Sports are one of the most promising pillars of the future of sports. Their success from a technical perspective depends on the ability to translate from a range of different input devices to a variety of motivating gaming, animation, and audio content – especially addressing force resistant and feedback solutions.

Martin and his team will be developing the outline of a modular solution to the controller / middlewear / cloud-based infrastructure, and pilot it with different input and output devices.

Further team members are especially welcome if they have coding and interface / mechatronic experience.

BIO-INSPIRED SOUND SAMPLES FOR ACTIVE MOBILITY

Daily exercise will increasingly be covered by active mobility, for example by using Micro vehicles. Their size lies between inline skates and electrically supported cargo cycles and they have no drive other than muscles, or a small electric support – neither of which usually produces any sounds. However, sounds, or acoustic signals, have at least three areas of functional importance that need to be considered: Instant alarm in case of emergency or desired attention, general awareness to prevent accidents, and possibly elements of joyification like entertainment, mental balance or pride.

This team will be looking into opportunities how bio-inspired sounds can be utilized to fulfill the above functions. For example, awareness sounds could be modelled after a bumblebee.

Dominik is still looking for participants with expertise in sound sampling and speaker technologies.

EMOSPORT: SOCIAL ON-LINE EXERCISING

Motivating people through emotions will be (and is) a must for an active society. For on-line exercising this is a big challenge. Thus, understanding how it works in a social network context will help in developing more engaging exercise programs.

This team, led by Quique Alcántara, will be exploring the keys of emotions of social on-line exercising as drivers of people's motivation to be active. Participants will create their own funny and engaging exercises. They will share them with other participants that will repeat the exercise and will report their perceptions and feelings.

Quique is looking for people creating, sharing and rating exercises.

GREEN EXERCISE

Research suggests that being physically active in green and blue natural environments (Green Exercise, GE) has affective physiological and psychological benefits in comparison to non-GE activities.

This team, led by Christoph Mall, will explore how the health benefits of GE e.g., Green Outdoor Games / Green Outdoor Play activities can be promoted/enhanced/fostered by implementing digital technologies. How important are social factors and social interaction? Which digital technologies /gadgets seem to be especially useful? Which environments are most promising? Which contents might deliver fun, enjoyment, relaxation?

Further creative team members are very welcome, no matter what practical, developmental, technical or scientific backgrounds they have!

GAMIFICATION OF SPORT SHOOTING EXERCISES: CREATING APPEALING TRAINING METHODS FOR DRY FIRING AND STRENGTH CONDITIONING

Doing a sport in a professional way means practicing a lot and building all the essential skills up to the highest level. A lot of exercising is necessary; however, many exercises can become boring or monotonous. In sport shooting for example, the dry firing and exercises for strength conditioning are not everybody's favorite thing to do. The idea of this team, led by Carina, elite target shooter, is to make these workout sessions more playful and at the same time more competitive by integrating them into an online game, using already existing electronic training systems.

Carina is especially looking for Experts of the Scatt training system, experts in e-sports and programming, music and sound, and in the visualization of a gaming program, trainers for expertise in Shooting (all disciplines possible), and professional athletes (all disciplines possible). Any other expertise you may bring into this game and think it can be a benefit, please let us know and join!

