SMARTfit
Functional and Brain Fitness Training
Based on Gamified Technology
SMARTfit is a multi-target system that displays complex information allowing various cognitive processes to be trained while motor and aerobic demands may be simultaneously placed on the user.

A solution to harnessing the synergistic effects of simultaneous cognitive and physical training such as:

- Dual Tasking / Multiple-tasking
- Visual-Cognitive-Motor Training
- Vestibular / Balance Training
- Somatosensory Function

Effective for a broad range of neurological, orthopedic and neuro-behavioral patients.
First Ever: Vision + Cognitive + Motor Training

- Customizable for each patient
- Progress Reporting
- Baseline Reporting
- Uses Gamification
- Highly engaging, enjoyable, and meaningful.
- Promotes neuroplasticity / neuro-recovery.

Diagram: Learning, Speed, Sensory Processing, Cardio, Calculation, Motor Skills, Memory, Balance.
SMARTfit Technology

Proprietary Operating System
Proprietary Platform Including OS/Extensive Applications and a 5-year planned release of upgrades and capability

High Quality Hardware
Configurable hardware, can be used as standalone unit or combine with other units enabling multi-player programming

iOS/Android App User Interface
✓ Tailored and scalable programs to meet unique needs of its end users
✓ Capability for data capture and reporting
✓ Dozens of gamified activities paired with countless functional exercises

Customized Content
✓ Hundreds of video supported programs customized to meet all applications
✓ Capable of capturing individual baseline baselines and detailed progress reporting
SMARTfit Technology

Key Elements of SMARTfit

✓ Content Platform
✓ Multisensory stimulation
✓ High-level engagement through gamification
✓ Instant feedback via measurable and tracked results
✓ Real, tactile, resistance and impact based training
✓ Progress reporting
✓ Baseline testing and reporting
✓ Engaging and FUN
✓ Results in high retention and improved performance
SMARTfit for Physical Therapy

Balance & Vestibular

Visual-Motor

Visual Cognitive Motor

Dual-tasking
Significant Benefits for Active Aging

Memory

Balance

Social Connection
SMARTfit for SENIOR REHAB
SMARTfit for OCCUPATIONAL THERAPY

Visual & UE-Motor
Pediatric Rehabilitation - Balance
SMARTfit for Speech Therapy

- Receptive and Expressive Disorders
- Cognitive-communication Disorders
- Articulation, Fluency and Resonance
- Memory
- Visual Scanning
- Visual Speech Perception
- All of the above and more with dual-tasking
SMARTfit is unique in that endless combinations of cognitive and physical challenges can be presented to each user.

Furthermore, IT and big-data ecosystem allows not only tracking of individual progress, but machine-learning and AI algorithms can be applied to fully quantify the neurological phenotype of entire populations and sub-populations and predict the effect of parallel training paradigms on SMARTfit.

In this way, the individual expertise of human virtuosos involved in therapy can be scaled up in almost limitless ways. The applications are of course endless, from neurorestoration to maintenance of wellness.”
Charles Flowers MD, FACS
Clinical Associate Professor of Ophthalmology at
USC Roski Eye Institute at Keck School of
Medicine. Director of Sports Vision Training and
Visual Rehab Center at USC Roski Eye Institute

“...I have been using SMARTfit on patients who have post-concussion syndrome and seeing most of their symptoms completely resolved within 2-3 weeks. I look forward to conducting a formal study to validate my findings.”

Christopher Powers, PhD, PT
USC Professor; Director Biokinesiology Program;
Co-Director Biomechanics Research Lab

“SMARTfit takes the focus of the player off the mechanics and moves it to the external, forcing the brain to solve two problems at the same time.”

“It solves the big missing part in rehab because we want carry-over onto the field. SMARTfit is a great tool to test if that is happening.”
“Everything in Parkinson’s research points to the need for combining cognitive challenges with physical activities - I cannot think of a better way to do that than with SMARTfit.”

Beth Fisher, PhD, PT, FAPTA
Professor of Clinical Physical Therapy Director,
Neuroplasticity and Imaging Laboratory Division of
Biokinesiology and Physical Therapy at USC