CYBATHLON
ETH zürich

CYBATHLON 2024

Brain-Computer Interface Race

Points	Scoring	Competition rule	Inclusion criteria
Pilots can achieve 10 points per tasks with a maximum of 100 points per run.	Pilots with the highest score and best time are rank best.	To control the game, the pilot must be able to send two continuous signals (speed & direction) and two discrete signals (select A or B).	Pilots with a spinal cord injury which results in loss of motor function in lower and upper limbs (e.g. tetra-plegia).

WWW.CYBATHLON.COM

BCI

Tasks

1. FURNITURE

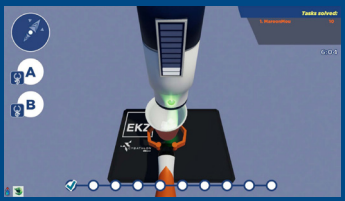
Task: Avoid fixed obstacles and reach the destination zone.
Test: Ability to navigate a obstructed room by controlling a wheelchair avatar.

2. VACUUM CLEANER

Task: Pilots must cross the room while avoiding the moving vacuum cleaner.
Test: Ability to navigate around moving objects by controlling a wheelchair avatar.

3. ICE MACHINE

Task: Pilots must position a glass under the ice machine and hold the glass still.
Test: Ability to hold a position for some time and wait.



4. KEY LOCK

Task: Pilots must navigate a key to the lock and turn the key to open or close the door.
Test: Manipulating small objects in multiple dimension.

5. COMPUTER SCREEN

Task: The pilots must navigate a cursor on the screen and click on the target icon.
Test: Ability to control a cursor on the screen.

CYBATHLON BCI

For a world without barriers!

maxon

EKZ

Schweizer Paraplegiker Stiftung

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Büro für die Gleichstellung von Menschen mit Behinderungen EBGB

[sn] super.natural

cerebral

STADTKLOTEN