

# BASE PACK FOR CUBITO

2025.1

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# WHAT IS NEEDED?

Please make sure the PC where you want this module to be active have VAST.Rehab Patient Panel installed and that following hardware requirements are met:

- Windows 10
- INTEL i5 processor
- 8GB RAM
- nVidia GeForce 1050 GTX graphic card

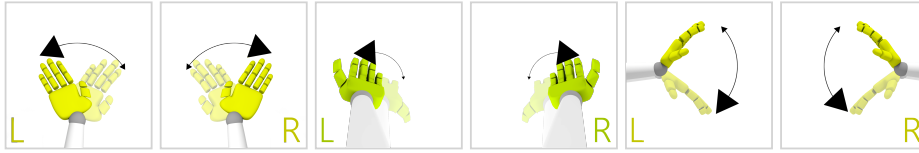


# RANGE OF MOTION

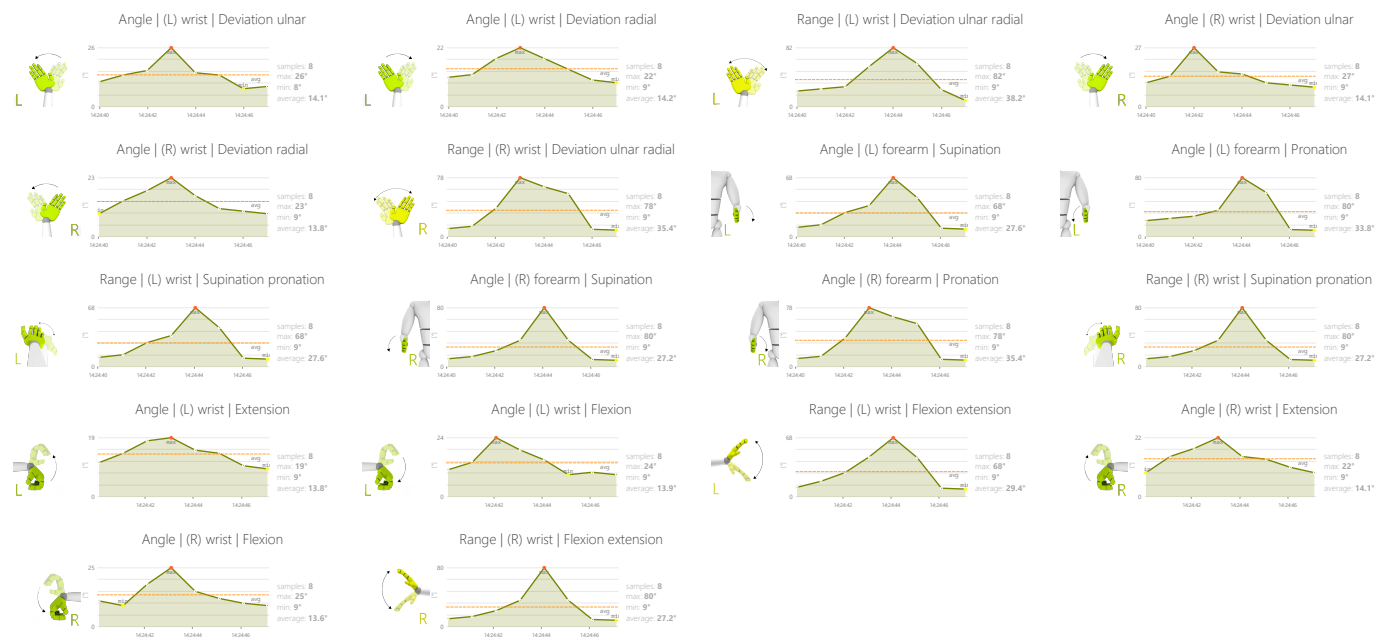
## ANGLES EVALUATION

Measure and gently motivate to increase individual's range of motion in predefined movement patterns.

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Angular range
- Time to complete action
- Resistance

### OBJECTIVES

- Range of motion examination

### INSTRUCTION FOR PATIENT

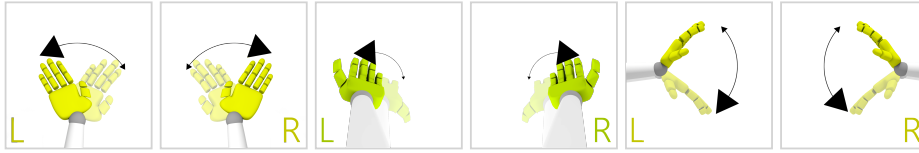
Try to achieve best result



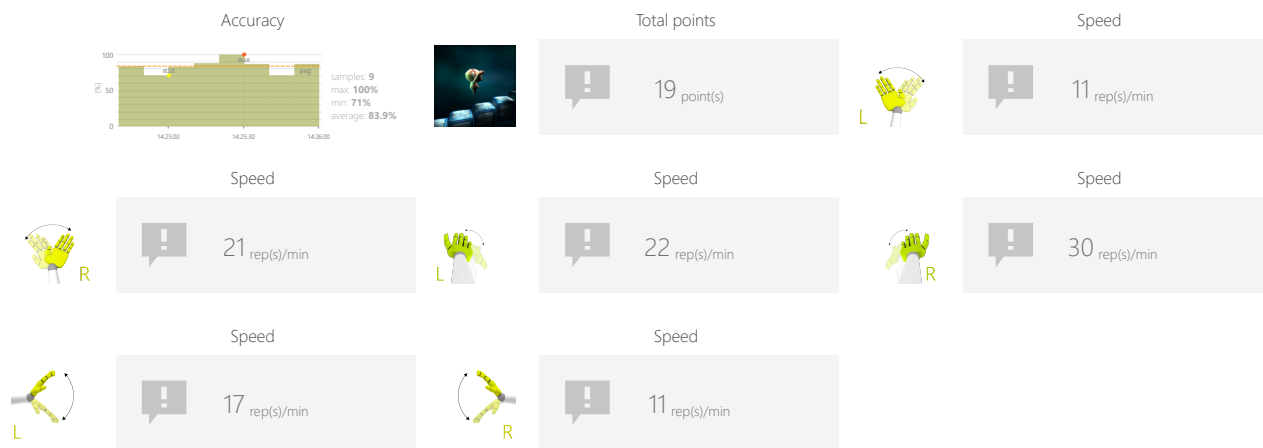
# SPEED STAIRS

Measure number of repetitions of specific movement pattern an individual is able to perform within predefined time interval.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Angular range
- Range adjustment
- Max time per floor
- Number of stairs
- Pause length
- Resistance

## OBJECTIVES

- Jumping
- Knees lifting
- Dynamics of planned movements

## INSTRUCTION FOR PATIENT

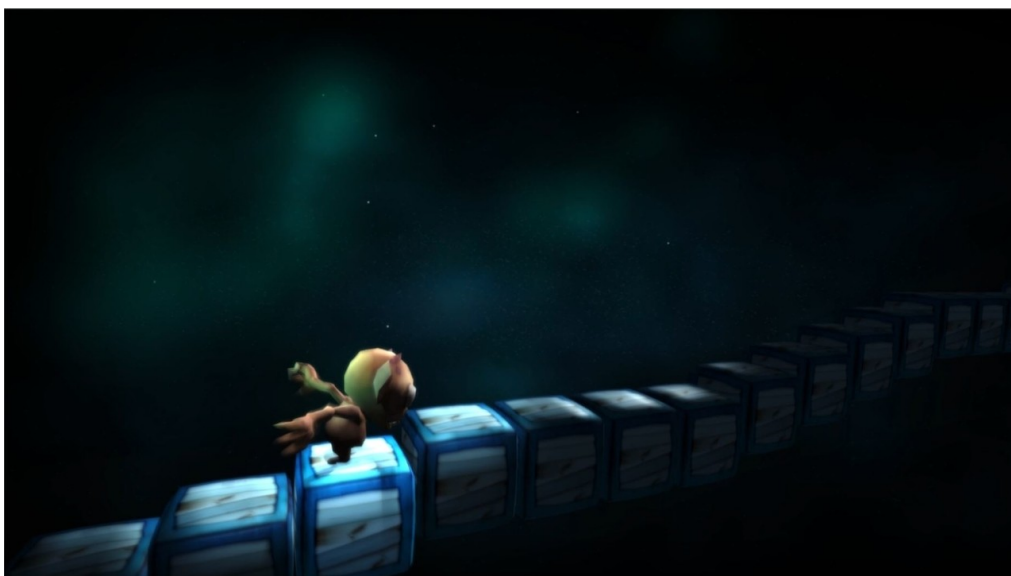
Climb the stairs before they disappear.

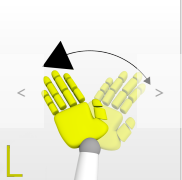
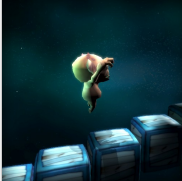


# SPEED

## STAIRS

### SAMPLE SETTINGS





◀

Difficulty

▶

custom

Duration

< 90s >

Angular range

< start ? end ? ° >

Range adjustment

0% ↔ 100%  
? ↔ ?

Max time per floor

< 15s >

Number of stairs

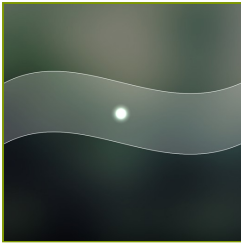
< 5 >

Pause length

< 3 >

Resistance rubber

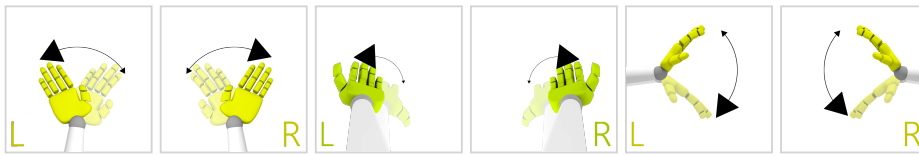
< 1° >



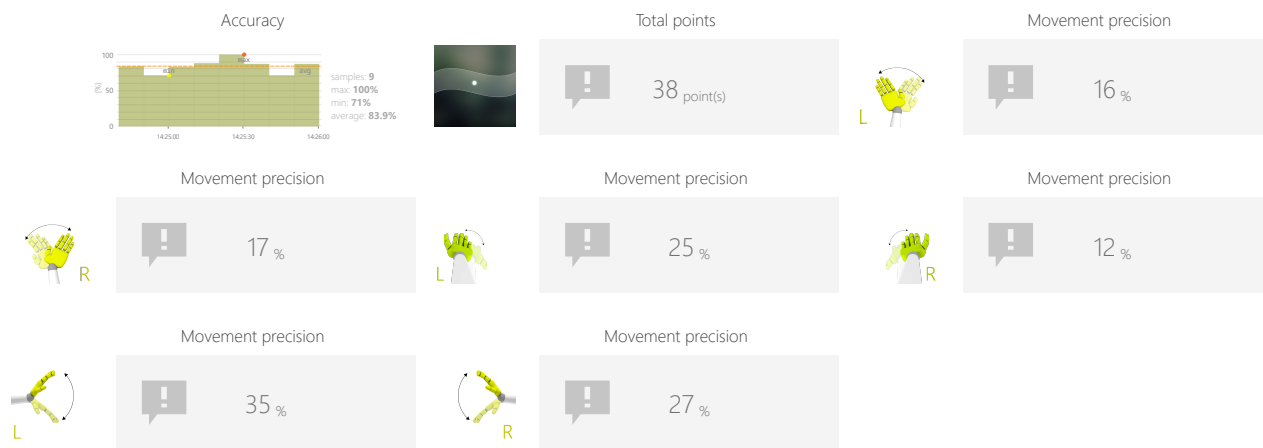
# MOVEMENT PRECISION GRAPH

Measure and train individual's skills to perform specific movement patterns with predefined speed and range.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Graph shape (sinus or square, amplitude, border, etc.)
- Task duration
- Angular range
- Range adjustment
- Resistance

## OBJECTIVES

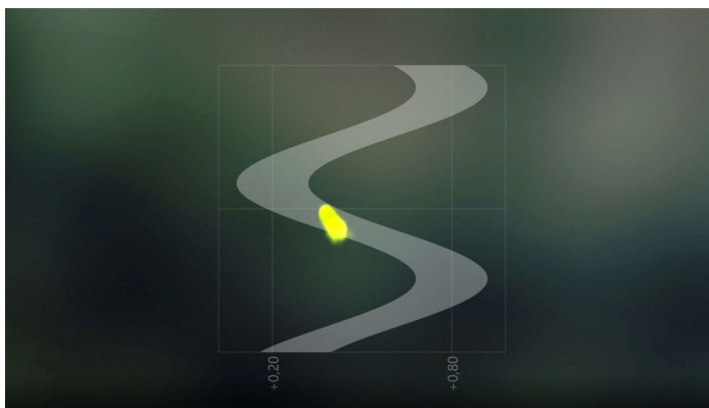
- Movement precision
- Activity in a given rhythm
- Repetitive movements
- Hands raising

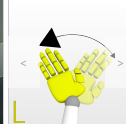
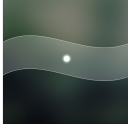
## INSTRUCTION FOR PATIENT

Try to stay within the borders.

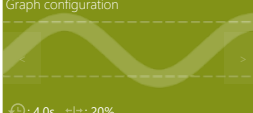


## SAMPLE SETTINGS






Difficulty **3/3**

Graph configuration  


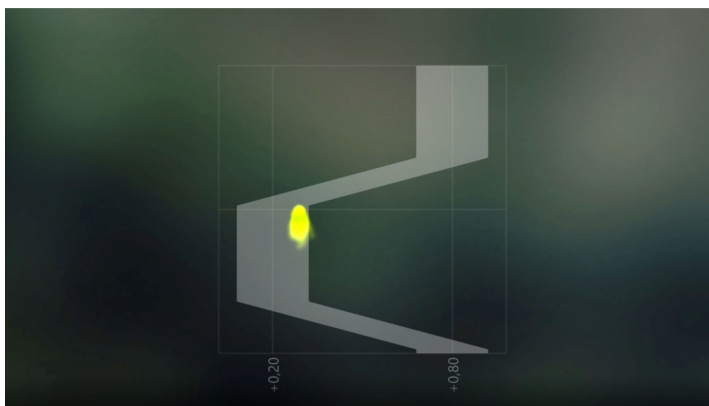
⌚: 4.0s +/-: 20%

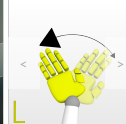
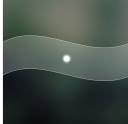
Duration  
< 30s >

Angular range  
 start ? end ?

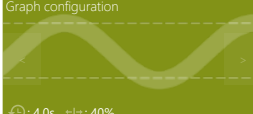
Range adjustment  
0% ↔ 100%  
? ↔ ?

Resistance rubber  
< 1 >






Difficulty **1/3**

Graph configuration  


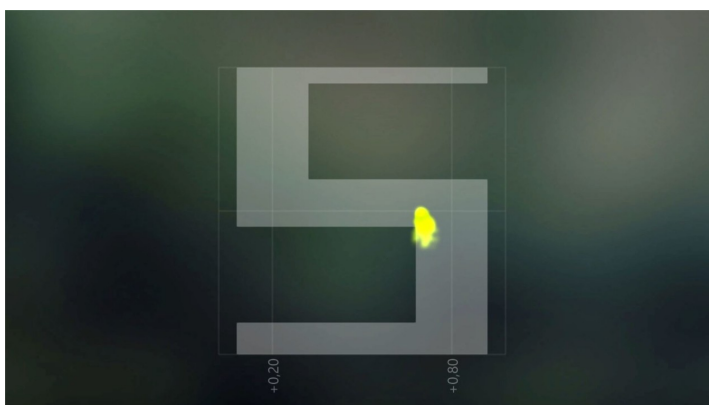
⌚: 4.0s +/-: 40%


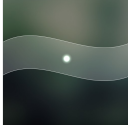
Duration  
< 90s >

Angular range  
 start ? end ?

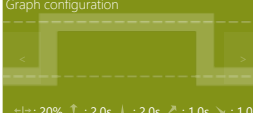
Range adjustment  
0% ↔ 100%  
? ↔ ?

Resistance rubber  
< 1 >






Difficulty **custom**

Graph configuration  


+/-: 20% ↑ : 2.0s ↓ : 2.0s ↗ : 1.0s ↘ : 1.0s

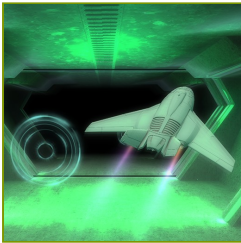
Duration  
< 30s >

Angular range  
 start ? end ?

Range adjustment  
0% ↔ 100%  
? ↔ ?

Resistance rubber  
< 1 >



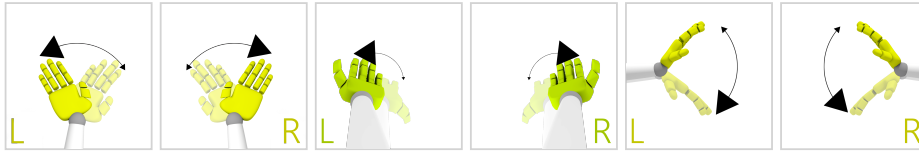


# FUNCTIONAL MOVEMENTS

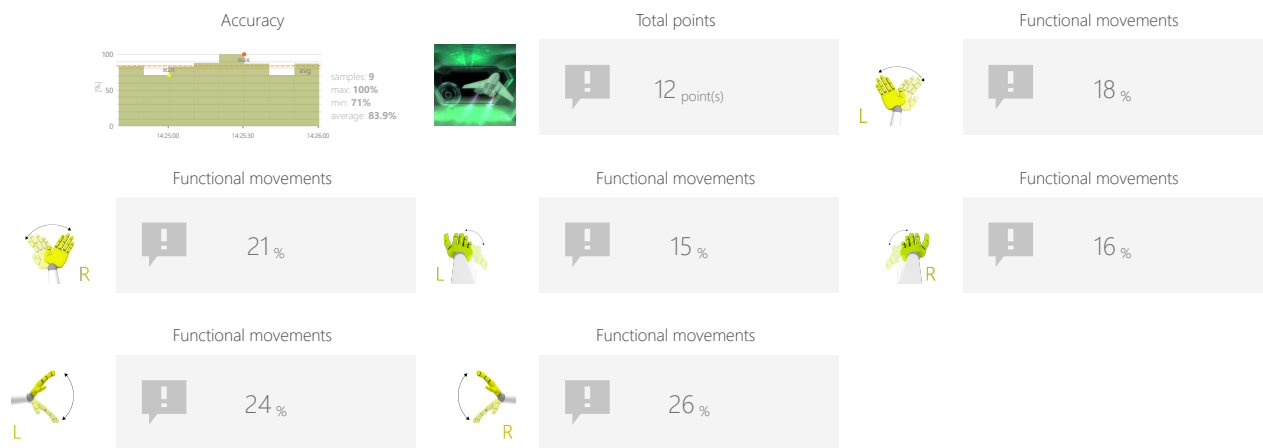
## AIRPLANE

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Speed
- Task duration
- Angular range
- Range adjustment
- Resistance

## OBJECTIVES

- Focusing
- Perceptivity
- Movement precision
- Predicting the trajectory of objects in 3D space
- Balance and equilibrium training

## INSTRUCTION FOR PATIENT

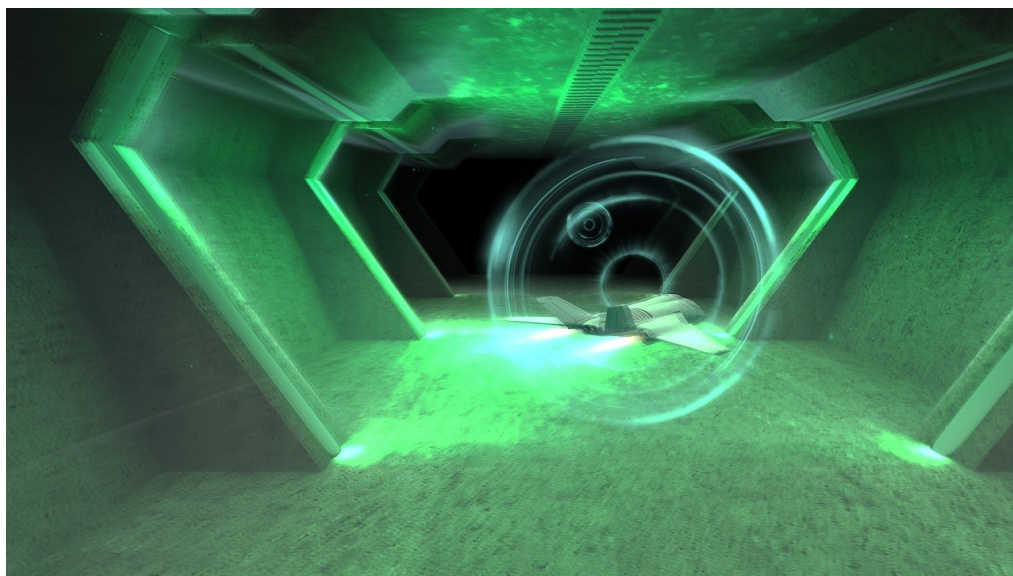
Make the airplane fly through the circles. The closer to the center it flies the more points you get.

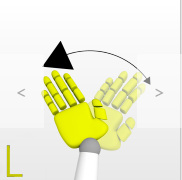
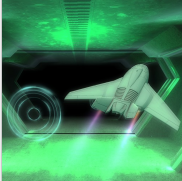


# FUNCTIONAL MOVEMENTS

AIRPLANE

## SAMPLE SETTINGS





◀

Difficulty

▶

2/4

Speed


< 100% >

speed set automatically

Duration

< 90s >

Angular range

<  >

start ? end ?

Range adjustment

0% ↔ 100%

? ↔ ?

Resistance rubber

< 1 >

0

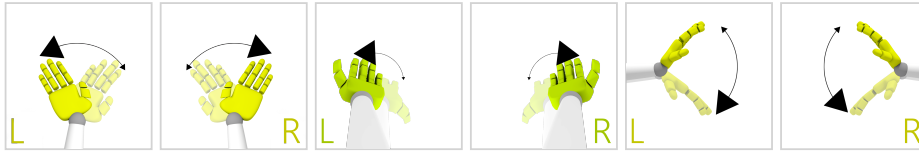


# FUNCTIONAL MOVEMENTS

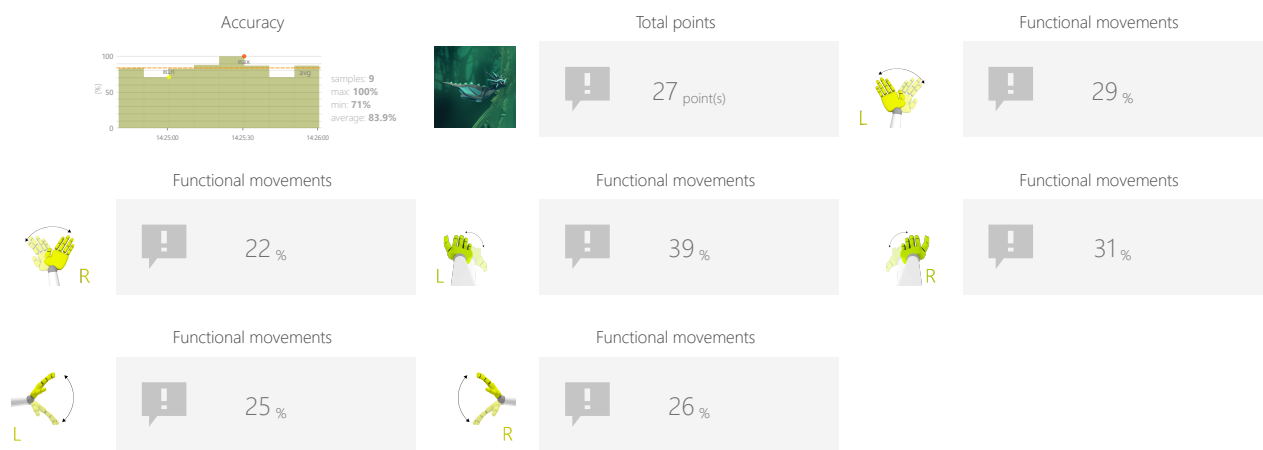
## DRAGON

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Angular range
- Range adjustment
- Coins group size
- Distance between coins
- Gravity force
- Resistance

## OBJECTIVES

- Predicting the trajectory of objects
- Improve range of motion
- Visual motor coordination
- Muscle strengthening
- Planning and Strategy

## INSTRUCTION FOR PATIENT

Fly and collect the coins.



# FUNCTIONAL MOVEMENTS

## DRAGON

### SAMPLE SETTINGS



◀	Difficulty <b>custom</b>	▶
Duration 90s		Angular range start ? end ?
Range adjustment 0% ↔ 100% ? ↔ ?		Coins group size 3
		Distance between coins 250%
Gravity force 100%		Resistance rubber 1



◀	Difficulty <b>1/3</b>	▶
Duration 90s		Angular range start ? end ?
Range adjustment 0% ↔ 100% ? ↔ ?		Coins group size 5
		Distance between coins 250%
Gravity force 100%		Resistance rubber 1

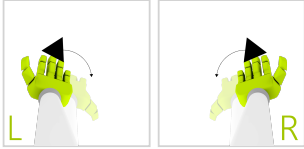


# FUNCTIONAL MOVEMENTS

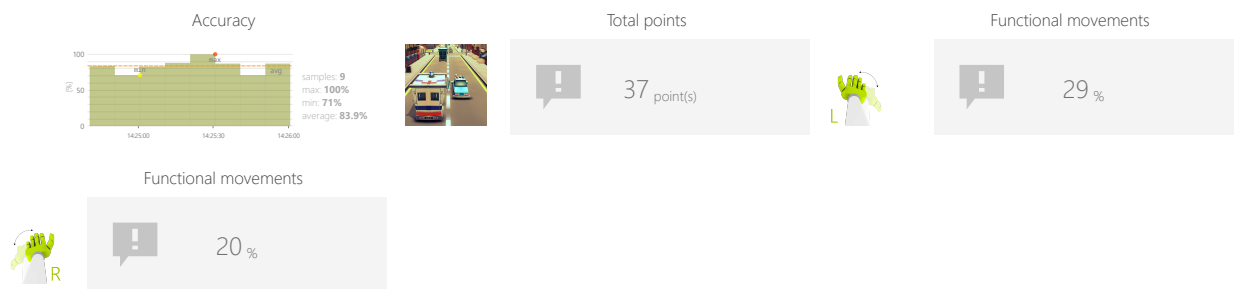
## AMBULANCE

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

## CONTROL MODES



## RESULTS

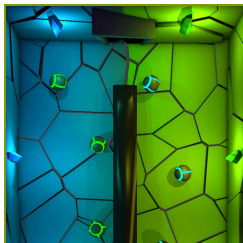


## OBJECTIVES

- Balance and equilibrium training
- Dynamics of planned movements
- Focusing
- Speed of decision making
- Visual motor coordination

## INSTRUCTION FOR PATIENT

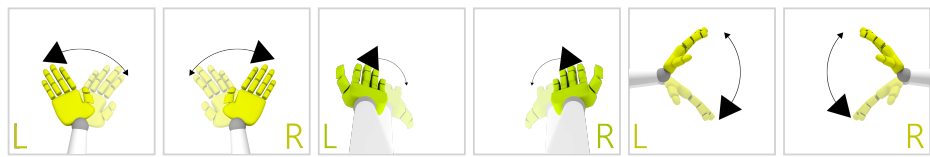
Go as fast as you can and avoid hitting other cars.



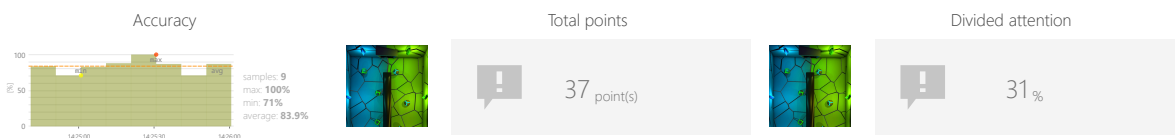
# DIVIDED ATTENTION SORTER

Measure and train individual's skills to successfully execute more than one action at a time, while paying attention to two or more channels of information.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Angular range
- Range adjustment
- Number of objects
- Gap size
- Speed of objects
- Resistance

## OBJECTIVES

- Predicting the trajectory of objects
- Focusing
- Perceptivity
- Movement precision
- Exercise with or without support from healthy limb

## INSTRUCTION FOR PATIENT

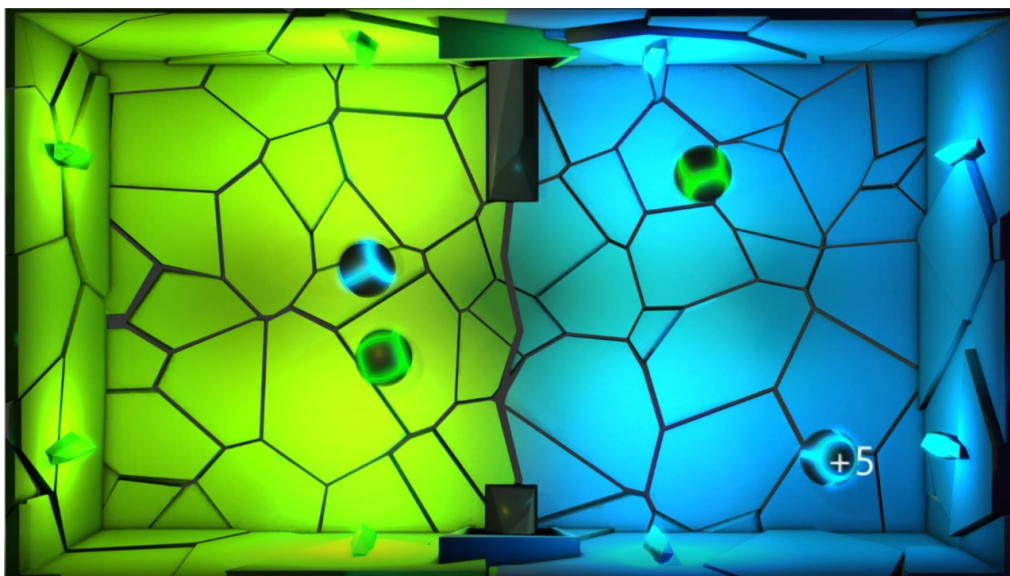
Pass or block the balls so that the blue balls are on the blue side and the green balls are on the green side of the screen.

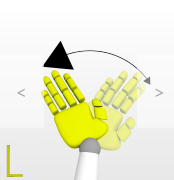
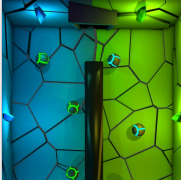




# DIVIDED ATTENTION SORTER



## SAMPLE SETTINGS





Difficulty **1/3**

Duration **30s**


Angular range   
start ? end ? 

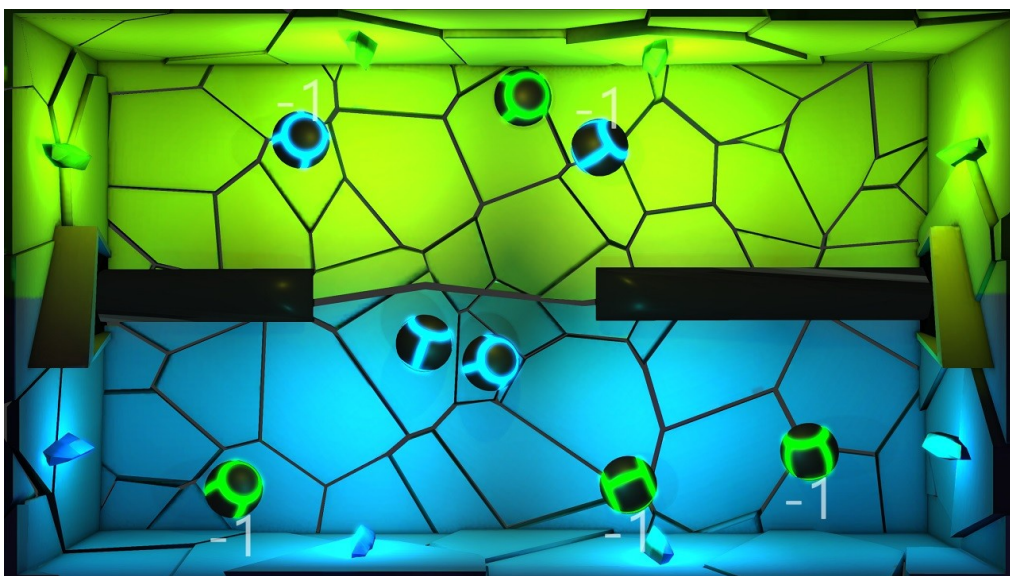
Range adjustment **0% ↔ 100%**  
? ↔ ?

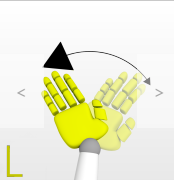
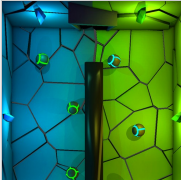
Number of objects **4**

Gap size **150%**

Speed of objects **100%**



Resistance rubber **1** 





Difficulty **1/3**

Duration **30s**


Angular range   
start ? end ? 

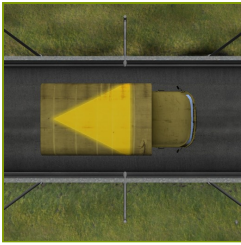
Range adjustment **0% ↔ 100%**  
? ↔ ?

Number of objects **4**

Gap size **150%**

Speed of objects **100%**

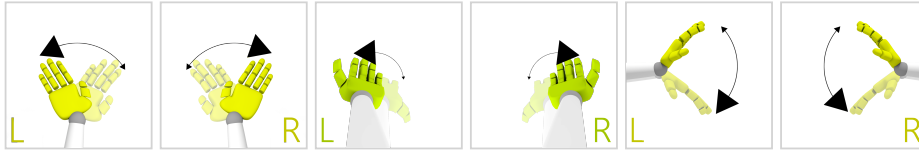
Resistance rubber **1** 



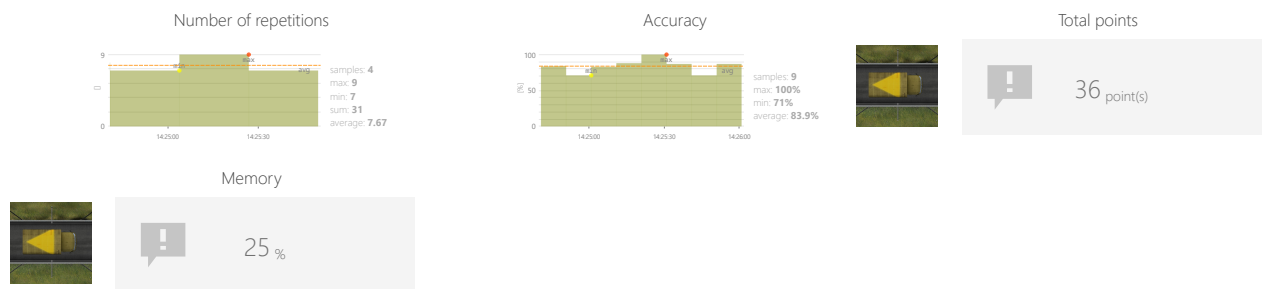
# MEMORY TRUCKS

Measure and train individual's skills to memorize information.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Angular range
- Range adjustment
- Resistance
- Variations

## OBJECTIVES

- Logical tasks
- Focusing
- Perceptivity

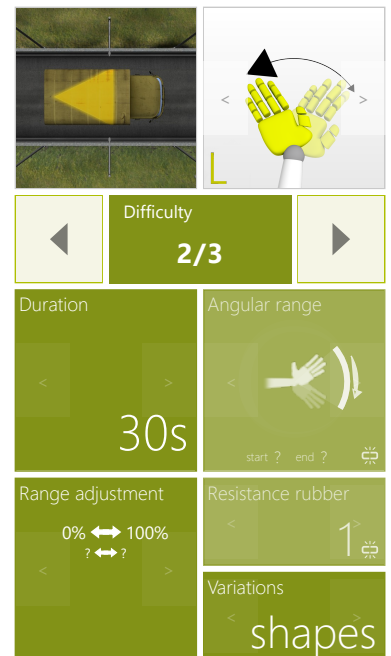
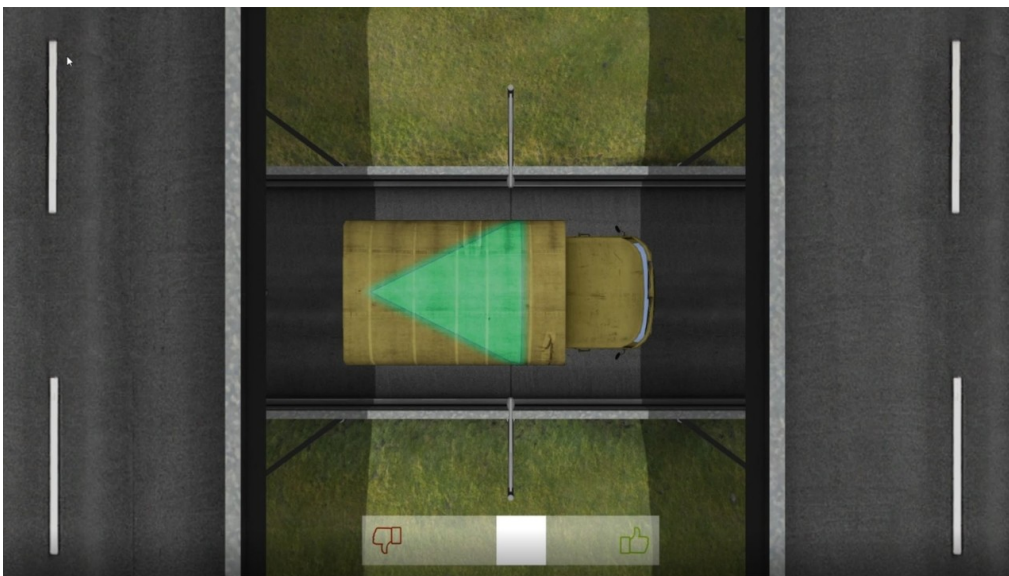
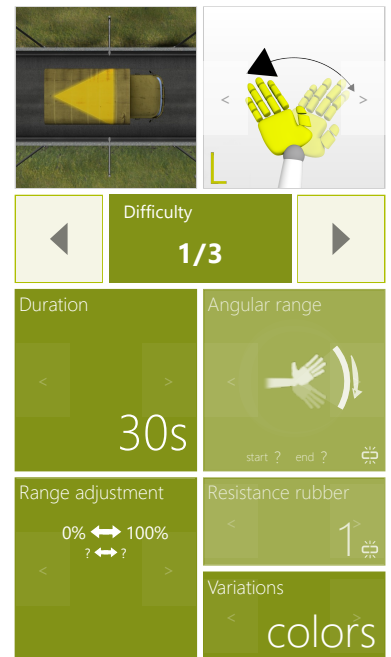
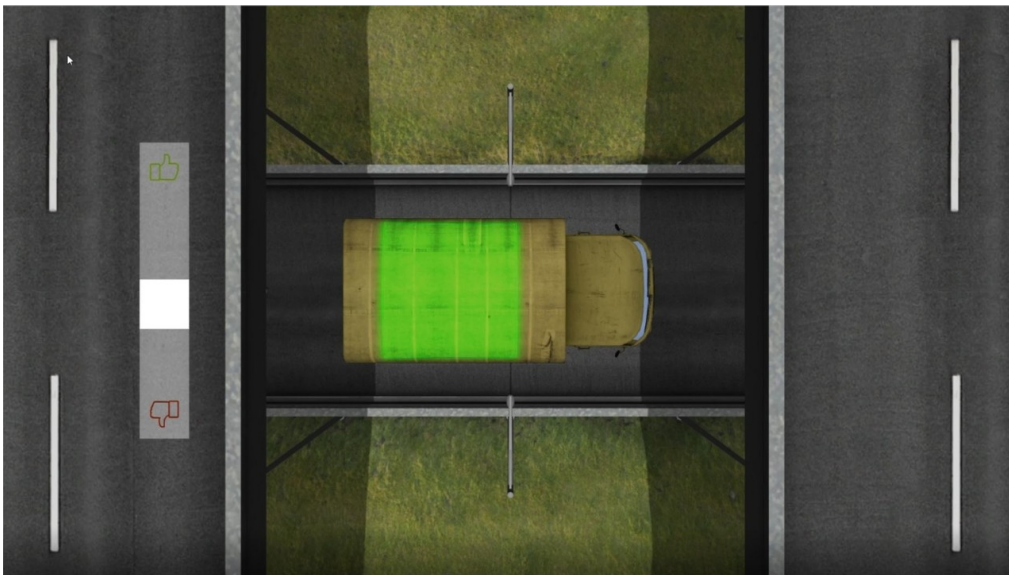
## INSTRUCTION FOR PATIENT

Remember the shape and/or its color on the roof of the car you see. Decide with thumbs up or down whether the next car has the same shape and/or color on the roof as the previous one.





## SAMPLE SETTINGS

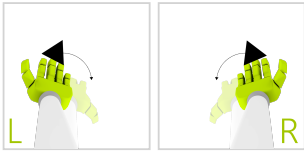




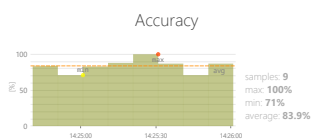
# PROBLEM SOLVING CLONES

Measure and train individual's skills to reach a solution of specific problems. Problem solving may include mathematical or systematic operations and can be a gauge of an individual's critical thinking skills.

## CONTROL MODES



## RESULTS



Total points



21 point(s)



Problem solving



29 %

## OBJECTIVES

- Perceptivity
- Visual motor coordination
- Logical tasks

## INSTRUCTION FOR PATIENT

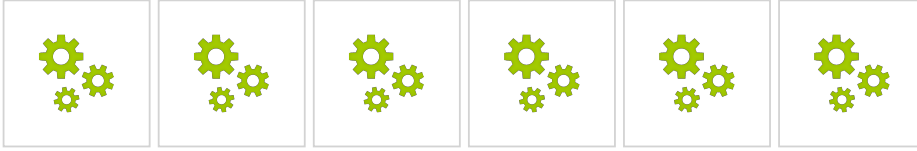
Select the item which has a pair on the screen.



## SPECIALIZED BLOOD PRESSURE

Specialized tasks and evaluations that collect data from multiple categories or do have a unique objectives.

### CONTROL MODES



### ADJUSTMENTS

- Angular range
- Range adjustment
- Resistance

### OBJECTIVES

- Monitor external parameters

### INSTRUCTION FOR PATIENT

Measure yourself your blood pressure and type it in the result.