

# VR FULL BODY + HANDS TRACKING

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 the following hardware requirements are met:

- Meta Quest 3





# MOVEMENT TIME

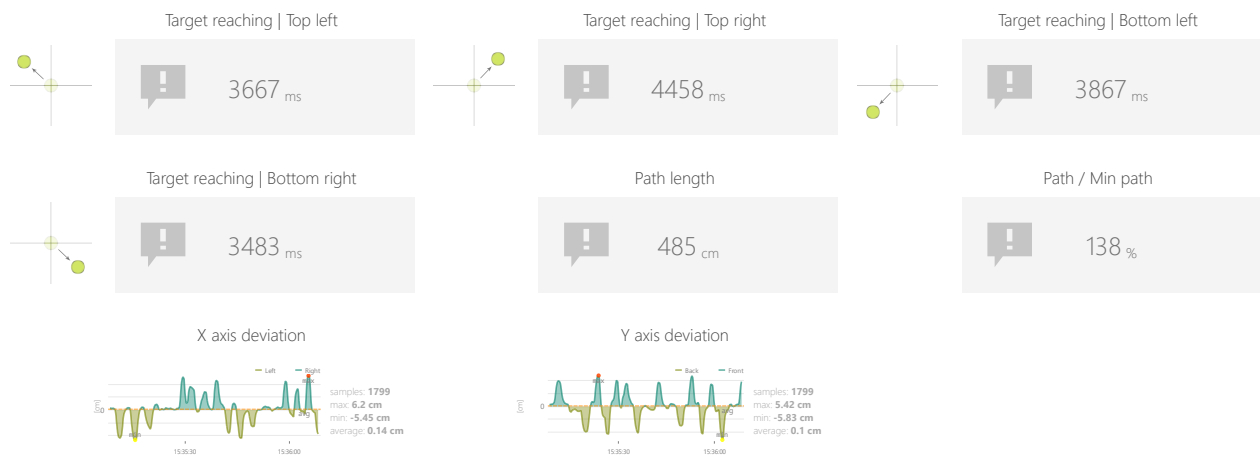
## DYNAMIC TEST

Measure time taken to carry out a movement of a limb or other part of the body. It is measured from rest to target position.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Range
- Show path
- Repetitions

## OBJECTIVES

- Test the limits of balance and equilibrium
- Dynamics of planned movements

## INSTRUCTION FOR PATIENT

Move the dot to the highlighted target and hold it for a moment. Next target will be highlighted.

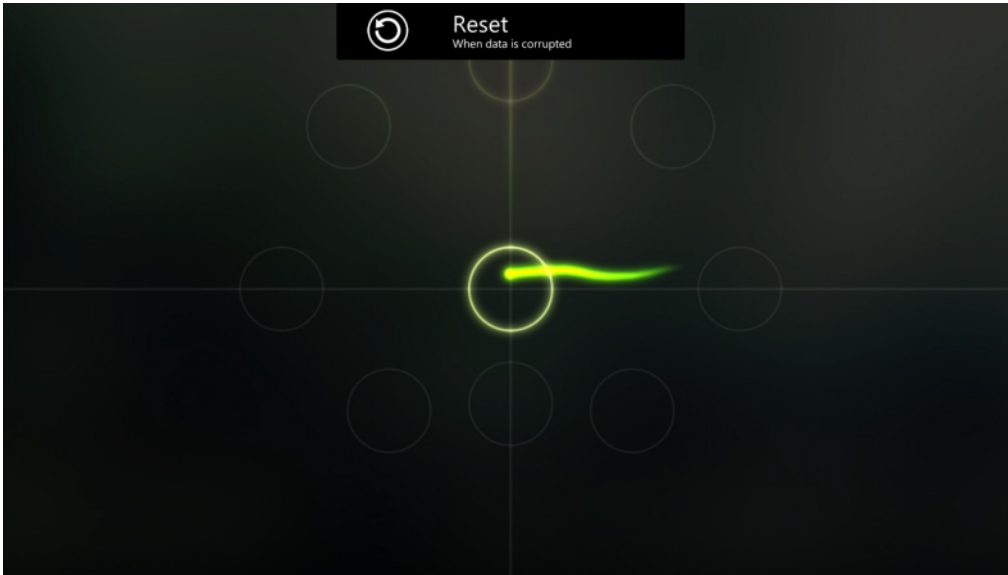




# MOVEMENT TIME

DYNAMIC TEST

## SAMPLE SETTINGS



Range

20% ↔ 80%

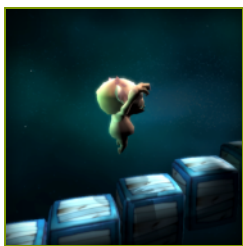
Show path

< No >

Repetitions

< 2 >

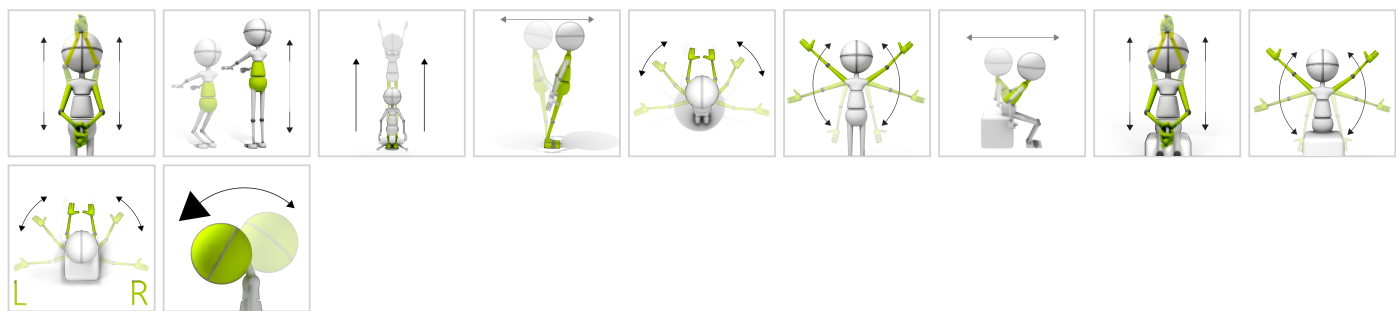




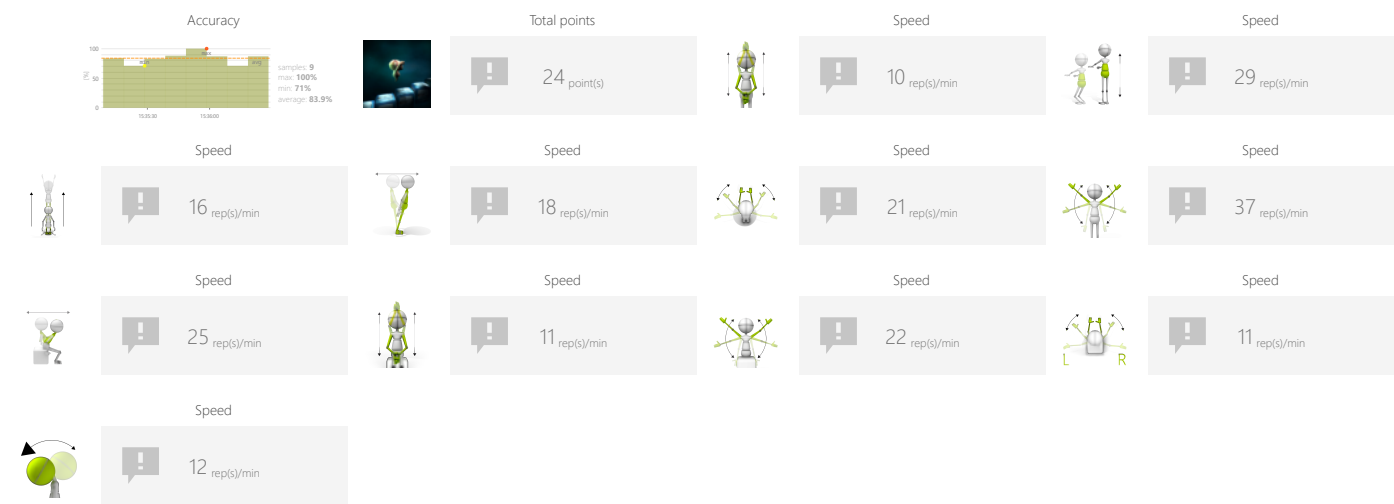
# SPEED STAIRS

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Max time per floor
- Number of stairs
- Pause length

## OBJECTIVES

- Dynamics of planned movements

## INSTRUCTION FOR PATIENT

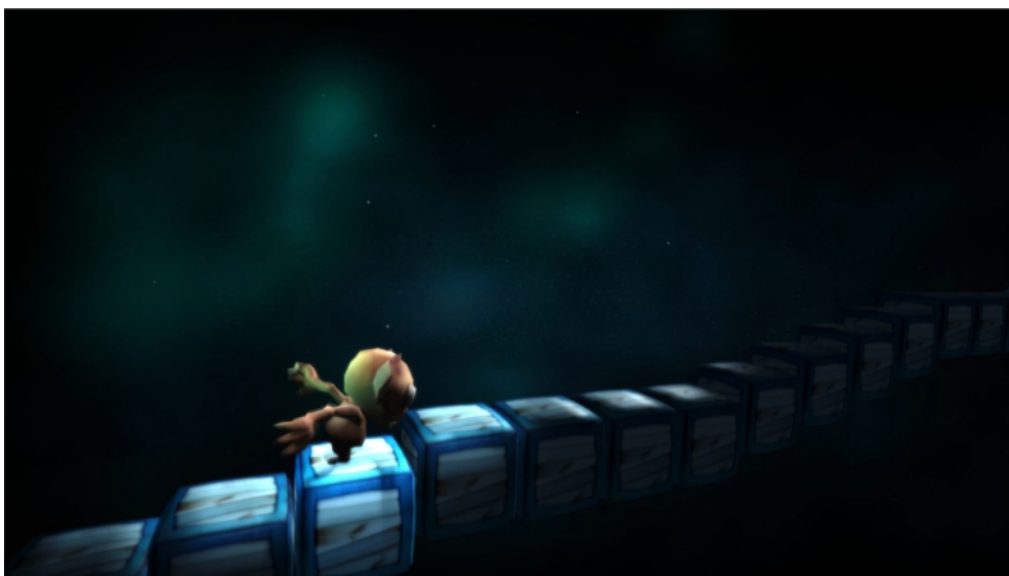
Climb the stairs before they disappear.





# SPEED STAIRS

## SAMPLE SETTINGS



◀	Difficulty <b>custom</b>	▶
Duration < 90s >		Range 20% 80% ↑ ↓ 
Max time per floor < 15s >		Number of stairs < 5 >
Pause length < 3 >		



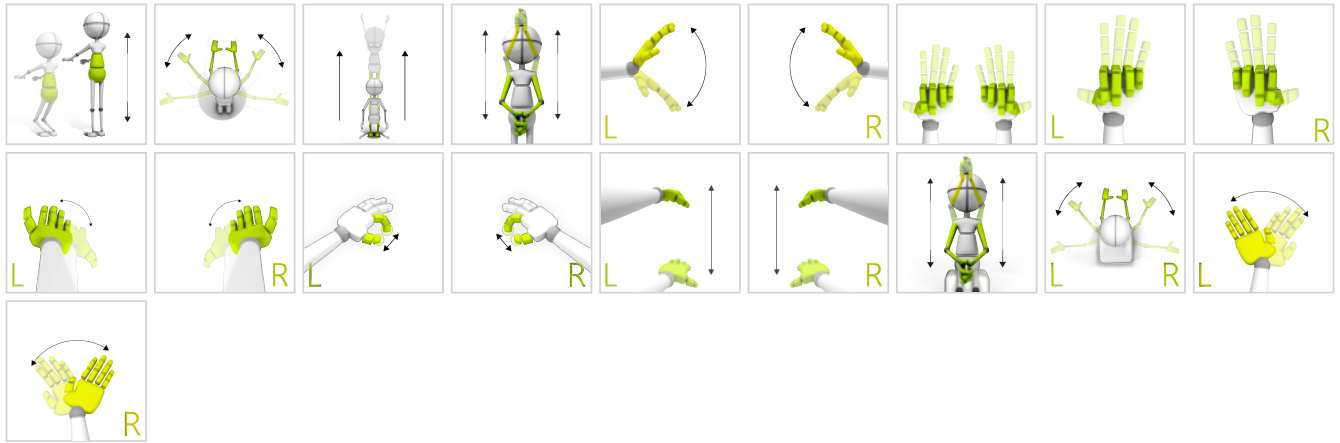


# SPEED

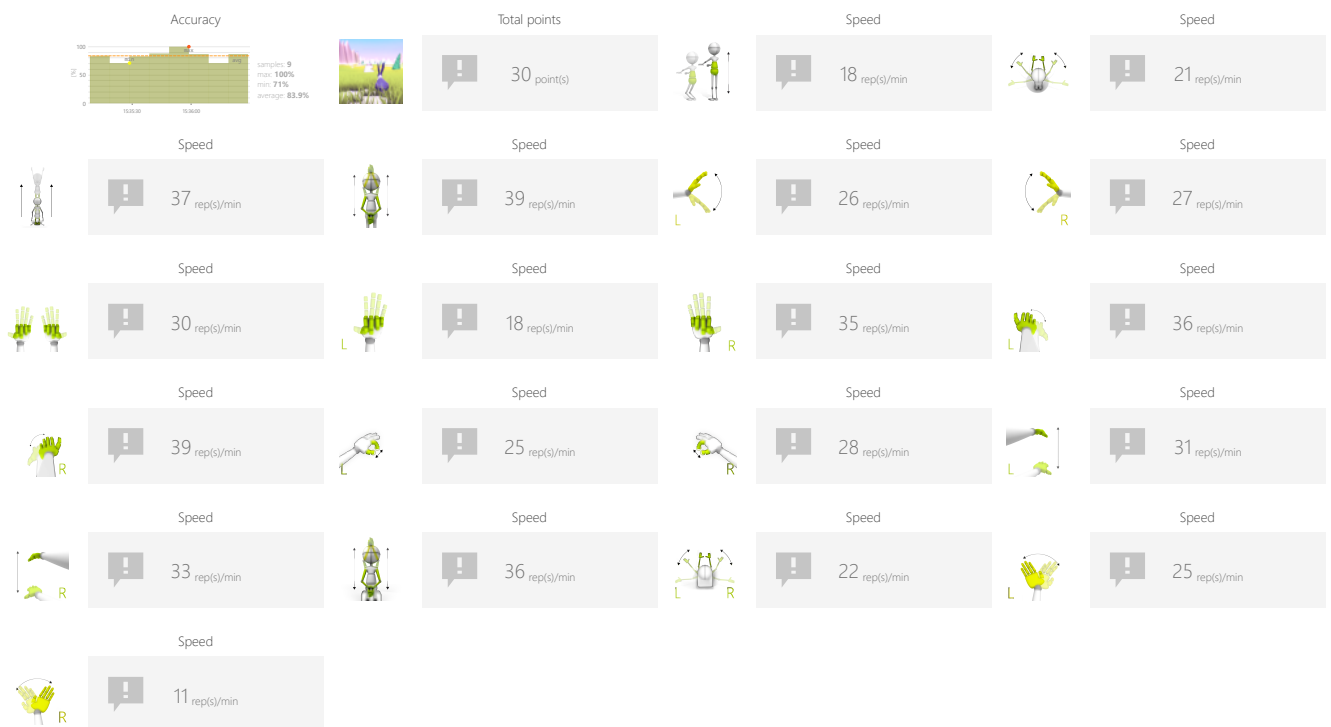
## RABBIT

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Task duration
- Range

### OBJECTIVES

- Speed of movement
- Repetitive movements

### INSTRUCTION FOR PATIENT

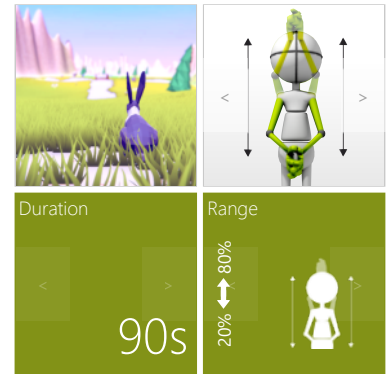
Go through the entire route as fast as you can.





## SPEED RABBIT

### SAMPLE SETTINGS





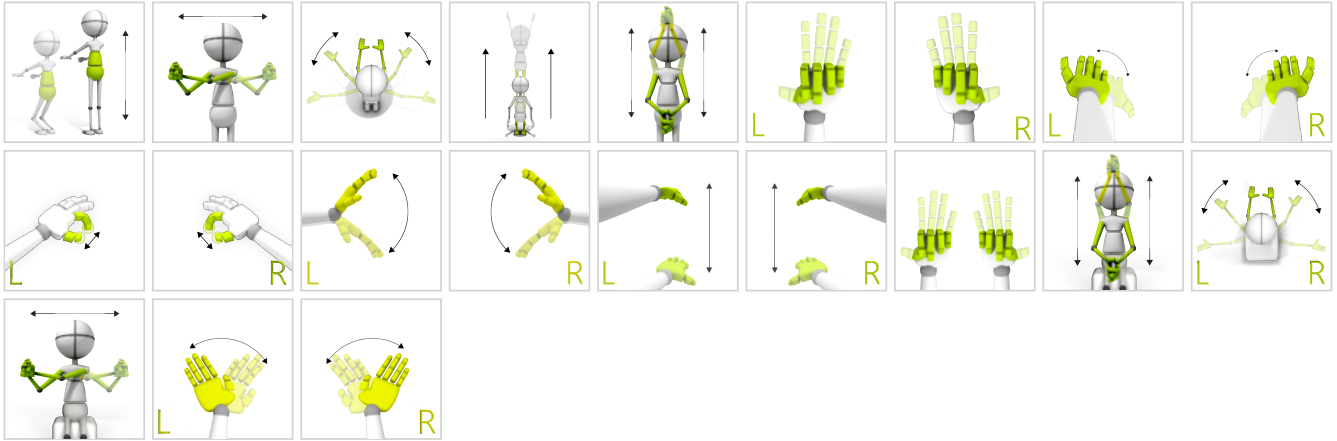


# SPEED

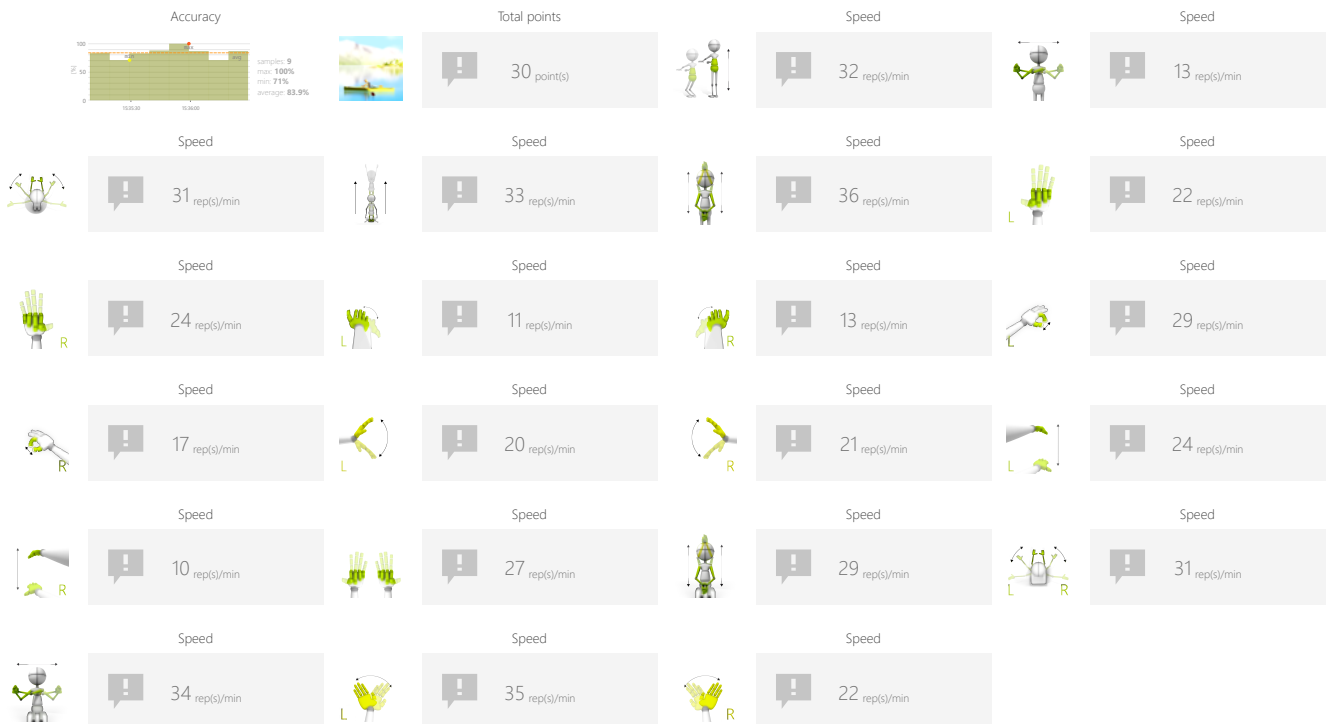
## KAYAK

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Task duration
- Range

### OBJECTIVES

- Speed of movement
- Repetitive movements

### INSTRUCTION FOR PATIENT

Row as fast as you can.



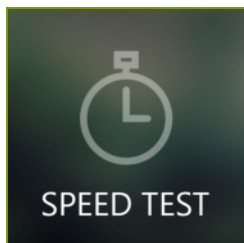


## SAMPLE SETTINGS



<p>Duration</p> <p>&lt; &gt;</p> <p>90s</p>	<p>Range</p> <p>20% 80%</p> <p>&lt; &gt;</p>



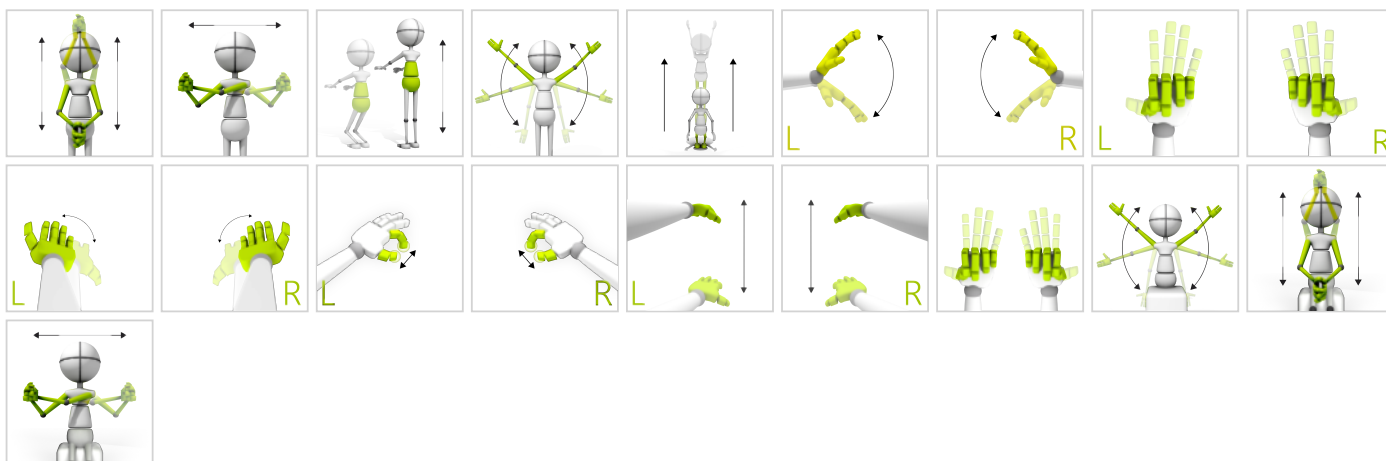


# SPEED

## SPEED TEST

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

## CONTROL MODES



## RESULTS

	Speed ! 29 rep(s)/min		Speed ! 15 rep(s)/min		Speed ! 18 rep(s)/min		Speed ! 34 rep(s)/min
	Speed ! 21 rep(s)/min		Speed ! 23 rep(s)/min		Speed ! 10 rep(s)/min		Speed ! 13 rep(s)/min
	Speed ! 29 rep(s)/min		Speed ! 32 rep(s)/min		Speed ! 33 rep(s)/min		Speed ! 36 rep(s)/min
	Speed ! 22 rep(s)/min		Speed ! 11 rep(s)/min		Speed ! 27 rep(s)/min		Speed ! 37 rep(s)/min
	Speed ! 26 rep(s)/min		Speed ! 28 rep(s)/min		Speed ! 30 rep(s)/min		

## ADJUSTMENTS

- Time to complete action
- Range

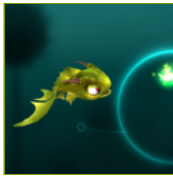
## OBJECTIVES

- Speed of movement
- Repetitive movements

## INSTRUCTION FOR PATIENT

Perform the specified movement pattern as many times as possible.



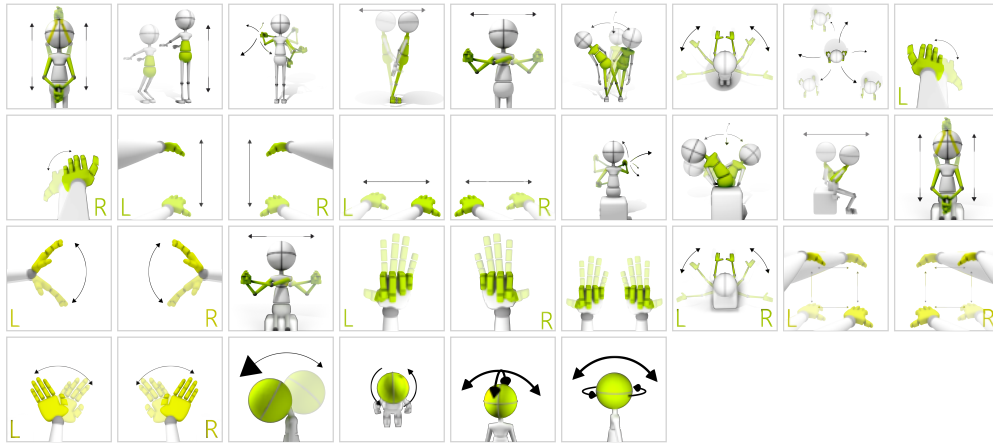


# MOVEMENT PRECISION

## FISH

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Task duration
- Range
- Speed of objects

### OBJECTIVES

- 3D space movements reproduction
- Planned movements
- Muscle strengthening
- Movement precision
- Visual motor coordination

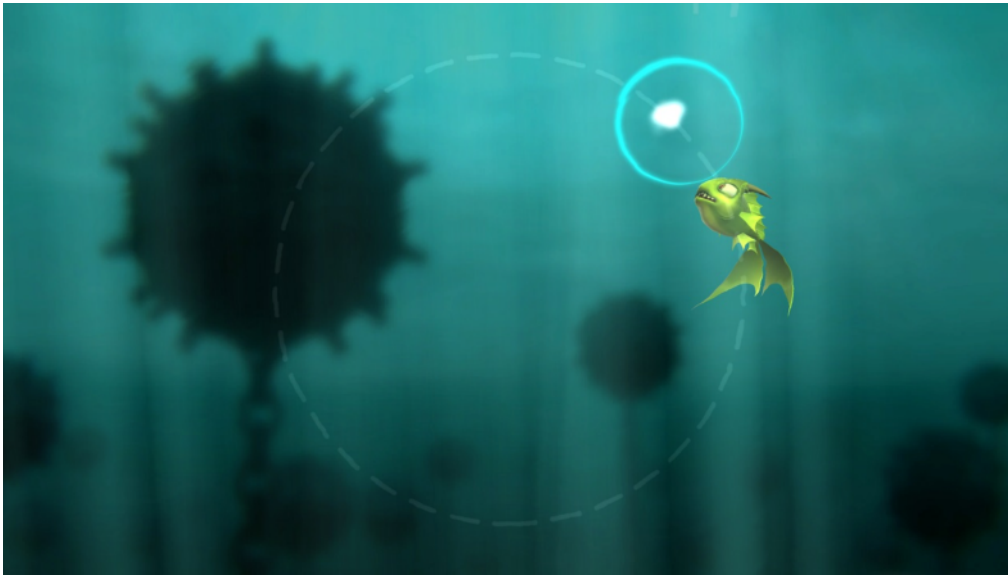
### INSTRUCTION FOR PATIENT

Move the blue circle to protect the sparks source from the fish.  
When the sparks source is inside the circle it is safe.

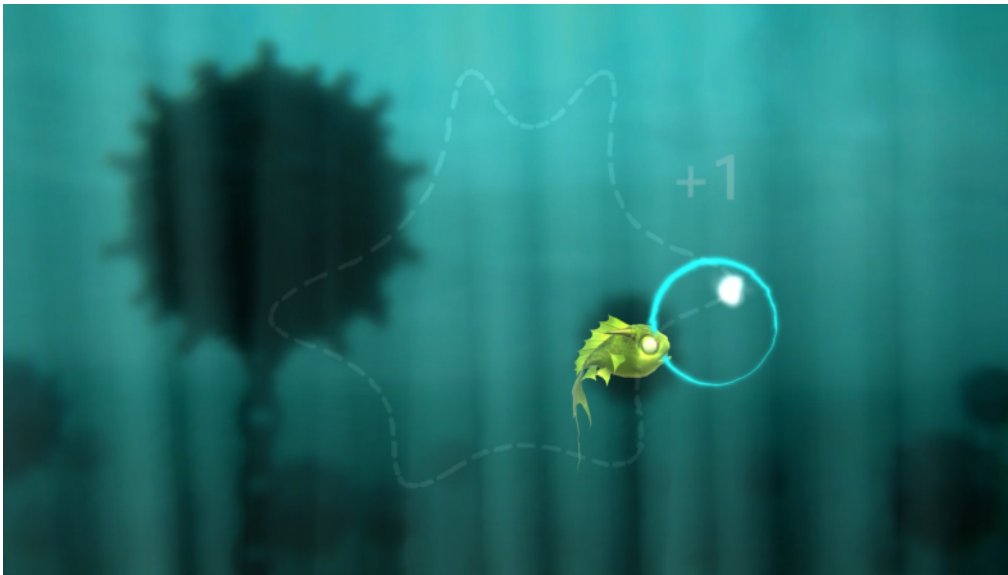




## SAMPLE SETTINGS

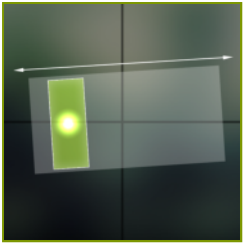


◀	Difficulty <b>custom</b>	▶
Duration 90s		Movement mode Left
Range 20% ↔ 80%		Route shape 
Speed of objects 100%		



◀	Difficulty <b>1/3</b>	▶
Duration 90s		Movement mode Left
Range 20% ↔ 80%		Route shape 
Speed of objects 100%		



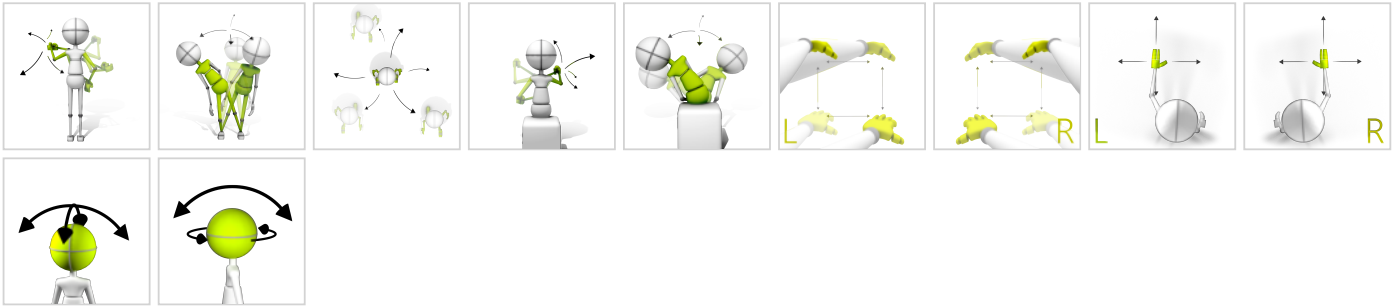


# MOVEMENT PRECISION

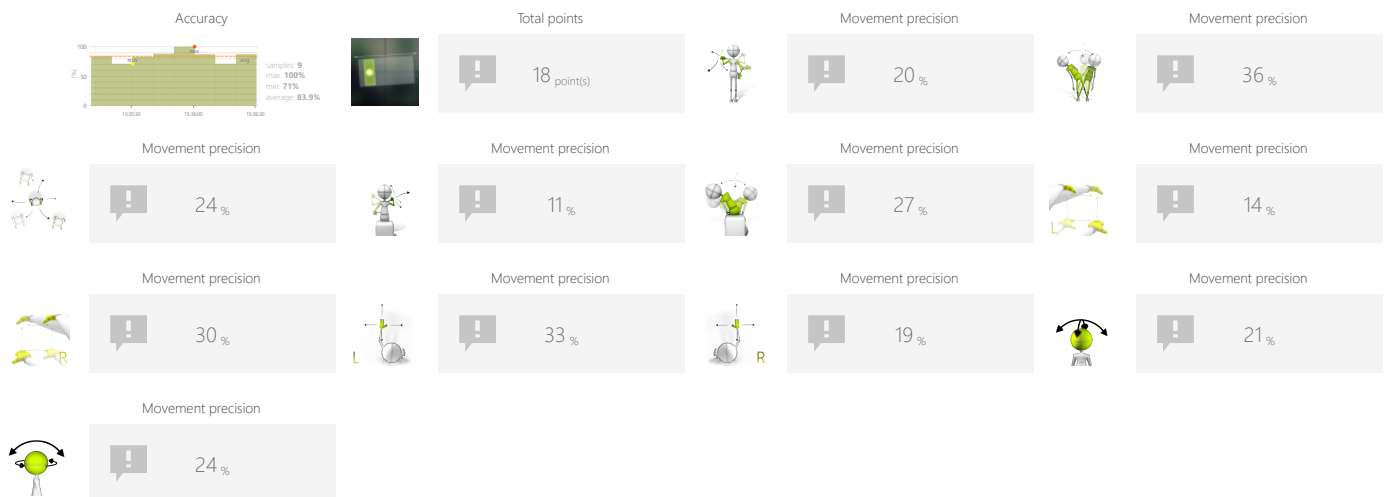
## PENDULUM

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Task duration
- Range
- Show path
- Period
- Rotation
- Pendulum height
- Pendulum width

### OBJECTIVES

- 3D space movements reproduction
- Rhythmicity
- Activity in a given rhythm
- Movement precision

### INSTRUCTION FOR PATIENT

Try to synchronize yourself with the rectangle movements. Do your best to stay within the rectangle.

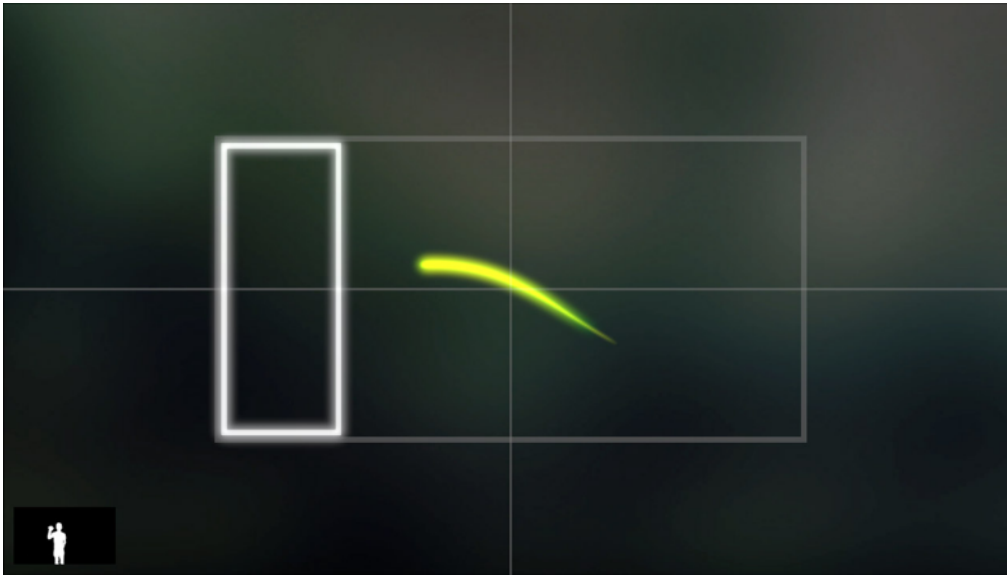






# MOVEMENT PRECISION

## PENDULUM

### SAMPLE SETTINGS





◀

Difficulty  
**1/2**

▶

Duration  
< 90s >

Range  
80%  
20% ↔ 80%  
20%

Show path  
< No >

Period  
< 5s >

Rotation  
< 0 >

Pendulum height  
< 50% >

Pendulum width  
< 100% >

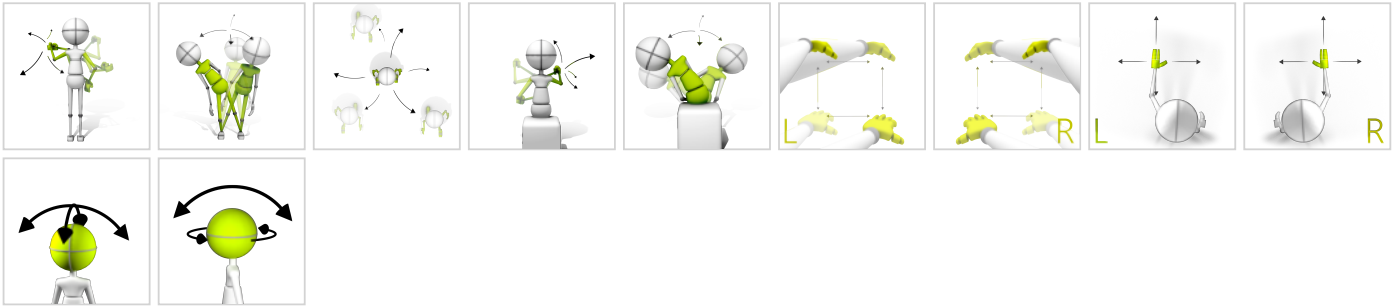




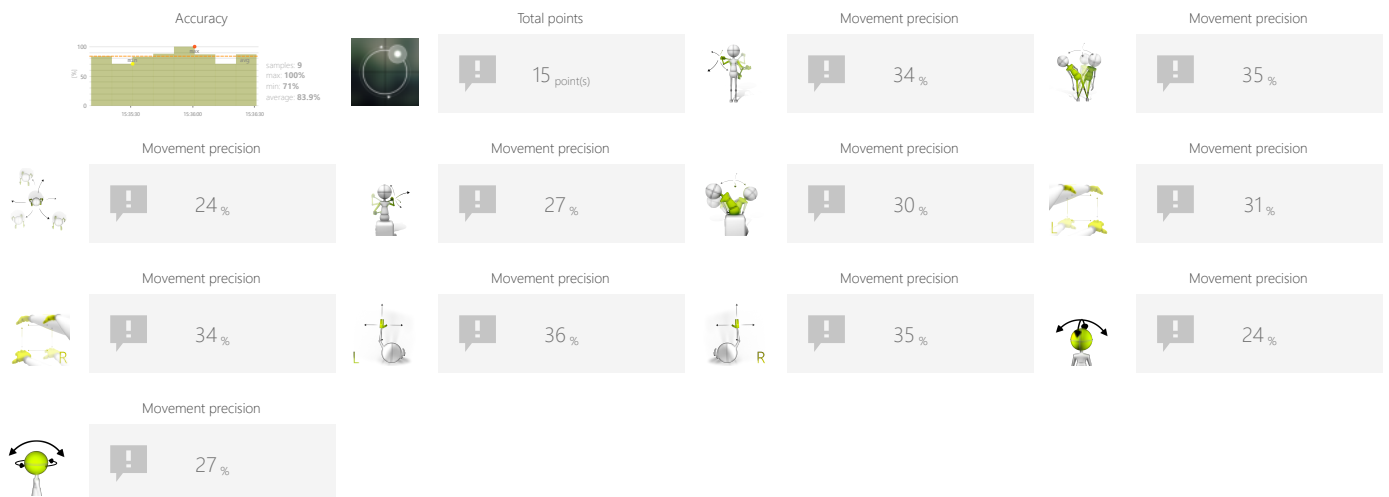
# MOVEMENT PRECISION TRACKING

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Inverse direction
- Show path
- Period
- Radius
- Target radius

## OBJECTIVES

- 3D space movements reproduction
- Test the limits of balance and equilibrium

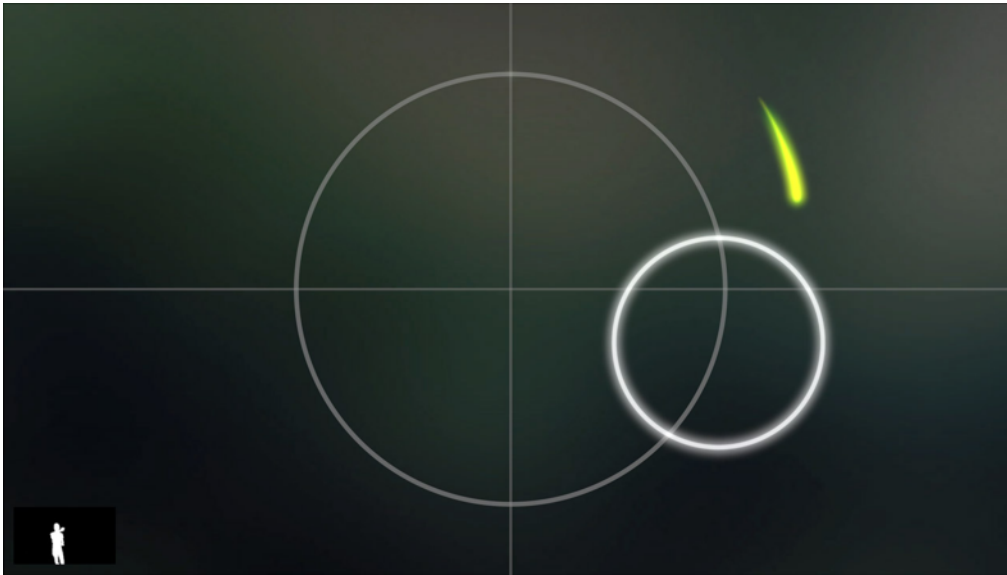
## INSTRUCTION FOR PATIENT

Try to synchronize yourself with the circle movements. Do your best to stay within the circle.





## SAMPLE SETTINGS



Duration < 90s >	Range 20% 80% 20% 80%
Inverse direction < No >	Show path < No >
Period < 10s >	Radius < 75% >
Target radius < 75% >	





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

Accuracy		Total points		Movement precision		Movement precision	
			37 point(s)			23 %	
	Movement precision		37 %		Movement precision		39 %
	Movement precision		30 %		Movement precision		11 %
	Movement precision		32 %		Movement precision		19 %
	Movement precision		25 %		Movement precision		22 %
	Movement precision		28 %		Movement precision		31 %
	Movement precision		33 %		Movement precision		25 %
	Movement precision		27 %		Movement precision		14 %
	Movement precision		35 %		Movement precision		22 %
	Movement precision		25 %		Movement precision		38 %

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

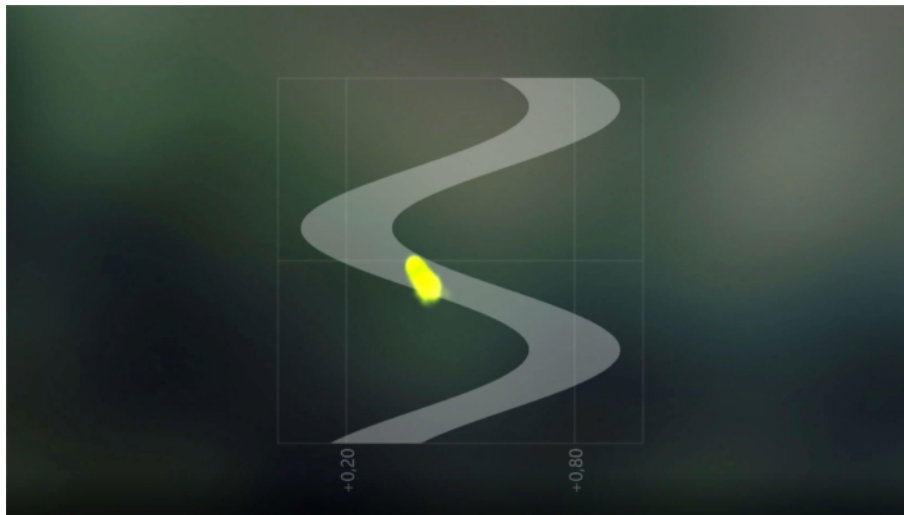
- Movement precision
- Activity in a given rhythm
- Repetitive movements


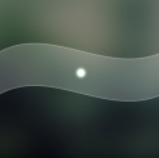
Try to stay within the borders.





## SAMPLE SETTINGS






◀

Difficulty

▶

3/3

Graph configuration



⌚ : 4.0s    ± : 20%

Duration

Range

◀

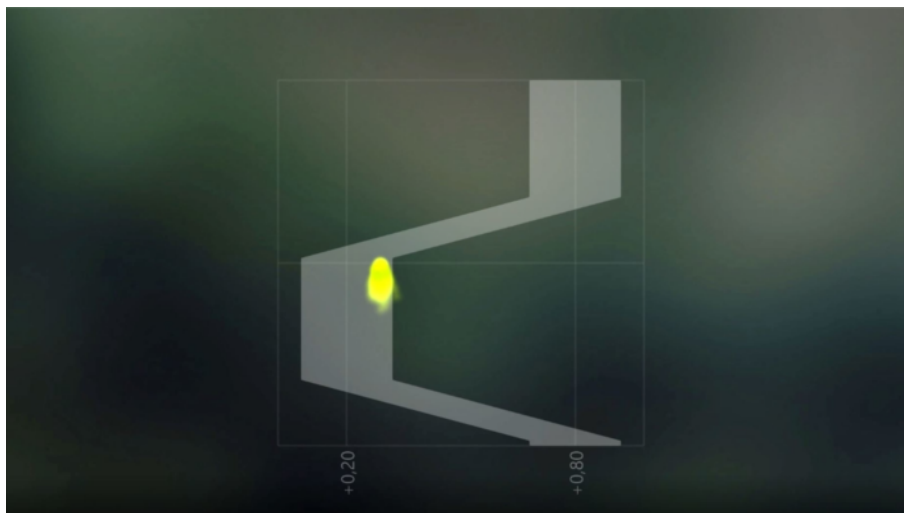
30s

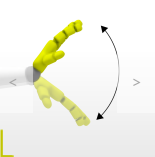
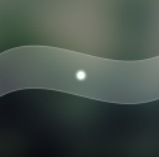
▶

◀

20% ↔ 80%

▶






◀

Difficulty

▶

1/3

Graph configuration



⌚ : 4.0s    ± : 40%

Duration

Range

◀

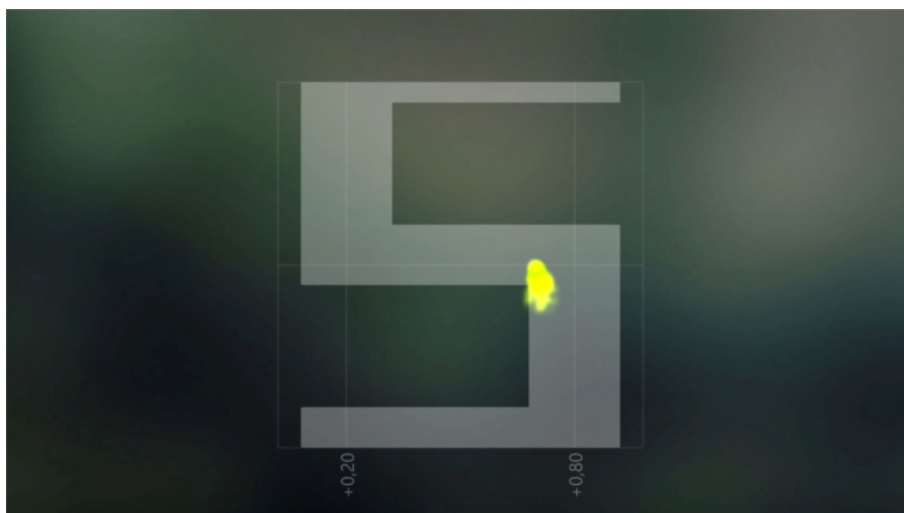
90s


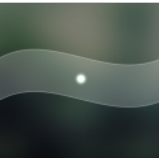
▶

◀

0% ↑ 100%

▶





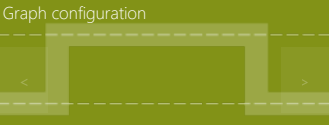
◀

Difficulty

▶

custom

Graph configuration



± : 20%    ↑ : 2.0s    ↓ : 2.0s    ↗ : 1.0s    ↘ : 1.0s

Duration

Range

◀

30s

▶

◀

20% ↔ 80%

▶









# MOVEMENT PRECISION

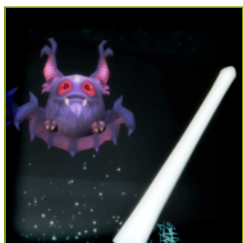
## UMBRELLA

### SAMPLE SETTINGS



◀	Difficulty <b>1/3</b>	▶
Duration 60s		Path 8.0s
Range 20% ↔ 80%		Umbrella size 150%



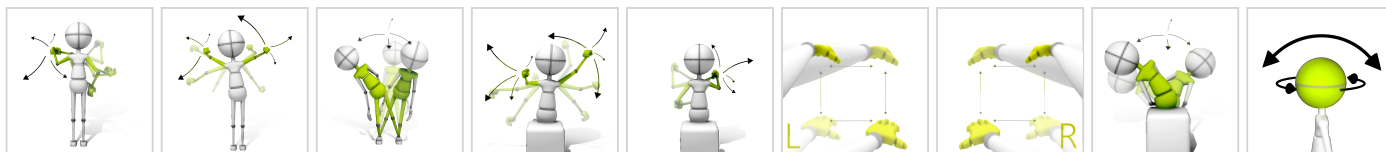


# FUNCTIONAL MOVEMENTS

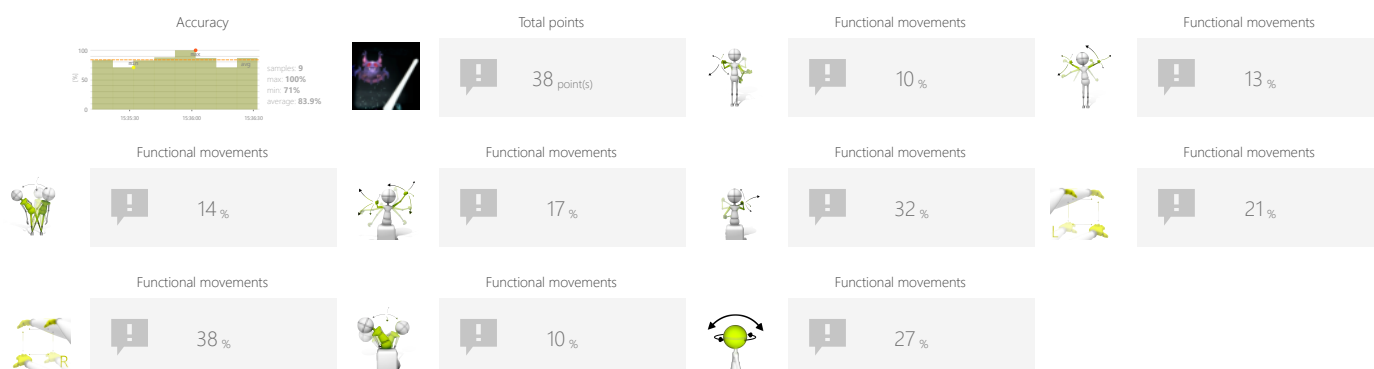
## VAMPIRES

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

- Positions to have targets on
- Task duration
- Range
- Time between objects
- Time to react

## OBJECTIVES

- Visual motor coordination
- Exercise with or without support from healthy limb
- Spontaneous movements in 3D space
- Speed of movement

## INSTRUCTION FOR PATIENT

Use your sword to knock down flying vampires who want to bite you!





## SAMPLE SETTINGS



Difficulty <b>1/3</b>	
Active positions 	Duration 90s
Time between objects 2s	Time to react 2s



Difficulty <b>1/3</b>	
Active positions 	Duration 90s
Time between objects 2s	Time to react 2s



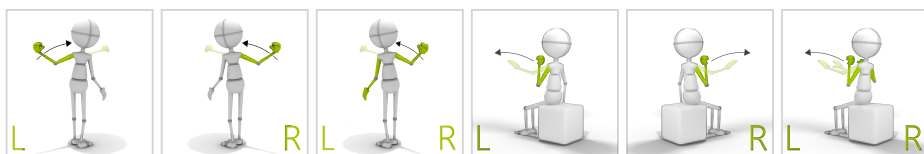


# FUNCTIONAL MOVEMENTS

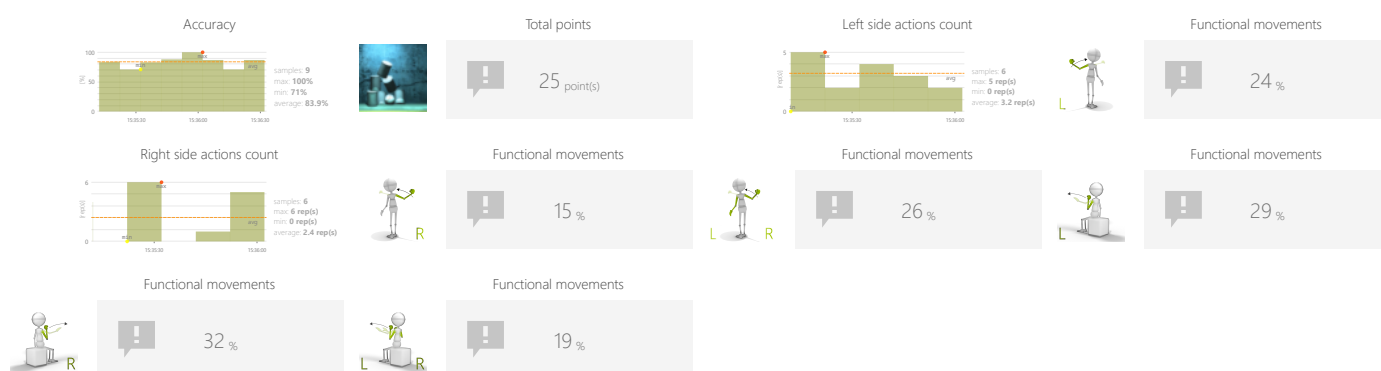
## CANS

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
- Speed of objects
- Weight of targets

## OBJECTIVES

- Movement precision
- Predicting the trajectory of objects in 3D space
- Dynamics of planned movements
- Dynamic responses to emerging moving targets
- The ability of spatial visualization

## INSTRUCTION FOR PATIENT

Throw the balls to strike as many cans as you can.



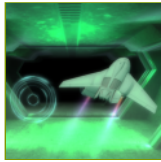


## SAMPLE SETTINGS



	Difficulty <b>1/4</b>
Duration <b>90s</b>	
Speed of objects <b>75%</b>	
Weight of targets <b>100%</b>	



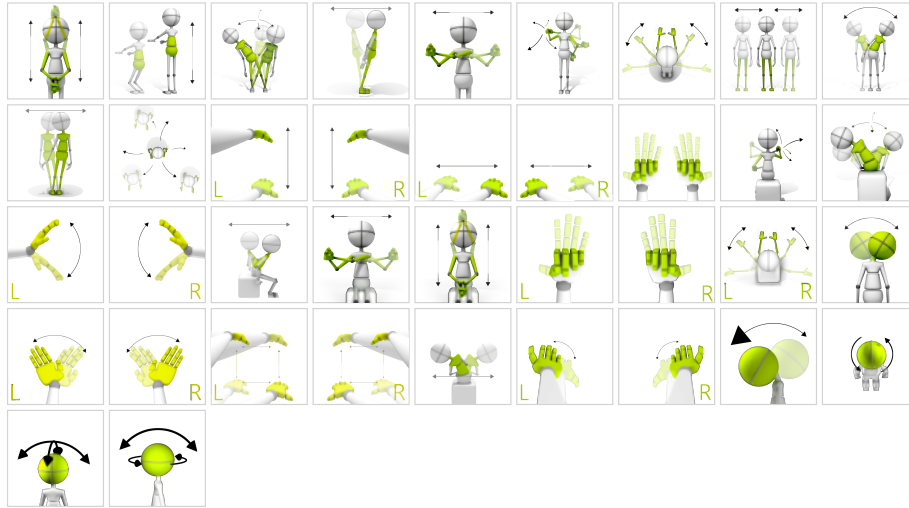


# FUNCTIONAL MOVEMENTS

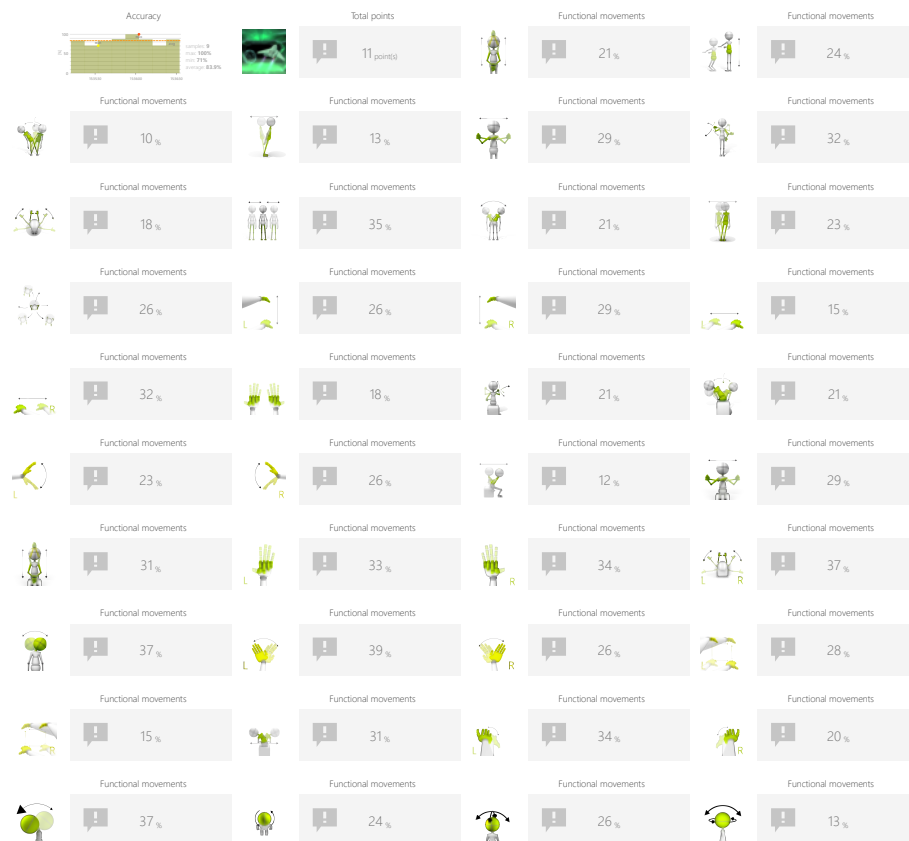
## AIRPLANE

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
- Range

### OBJECTIVES

- Focusing
- Perceptivity
- Movement precision
- Predicting the trajectory of objects in 3D space

### INSTRUCTION FOR PATIENT

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

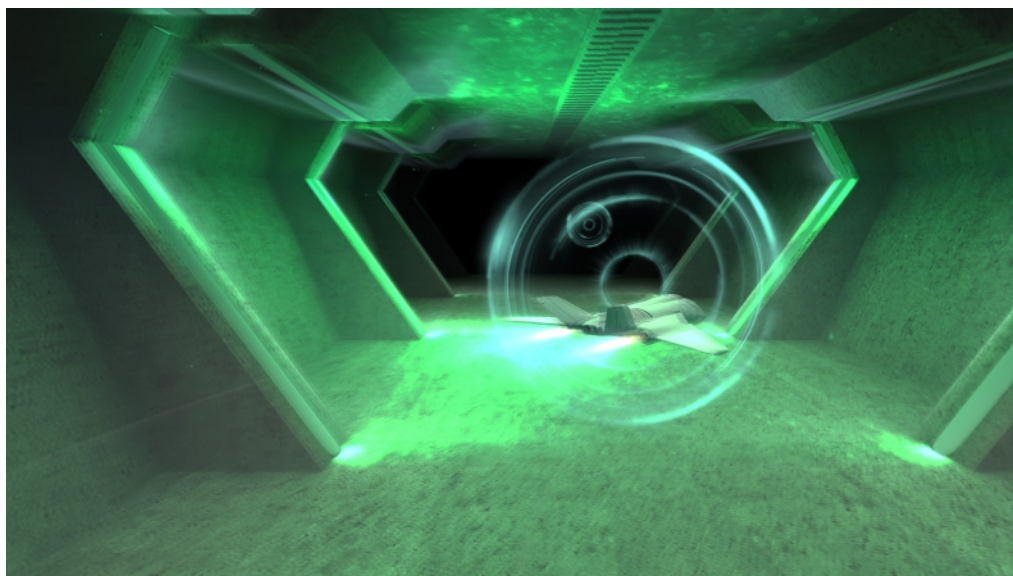



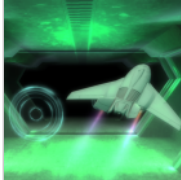


# FUNCTIONAL MOVEMENTS

AIRPLANE

## SAMPLE SETTINGS





◀

Difficulty  
**2/4**

▶

Speed

< 100% >

speed set automatically

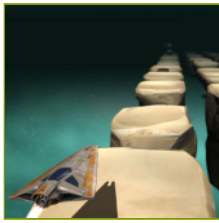
Duration

< 90s >

Range

< 20% ↔ 80% >



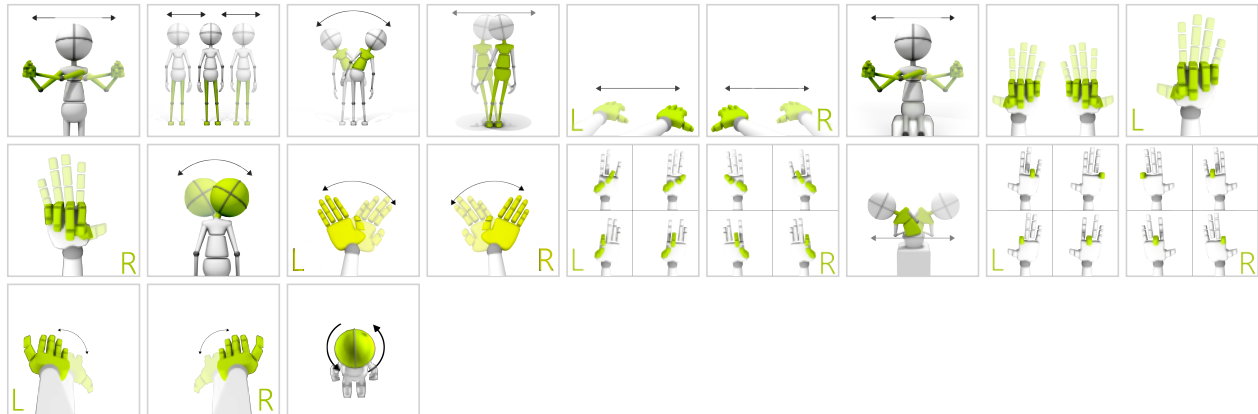


# FUNCTIONAL MOVEMENTS

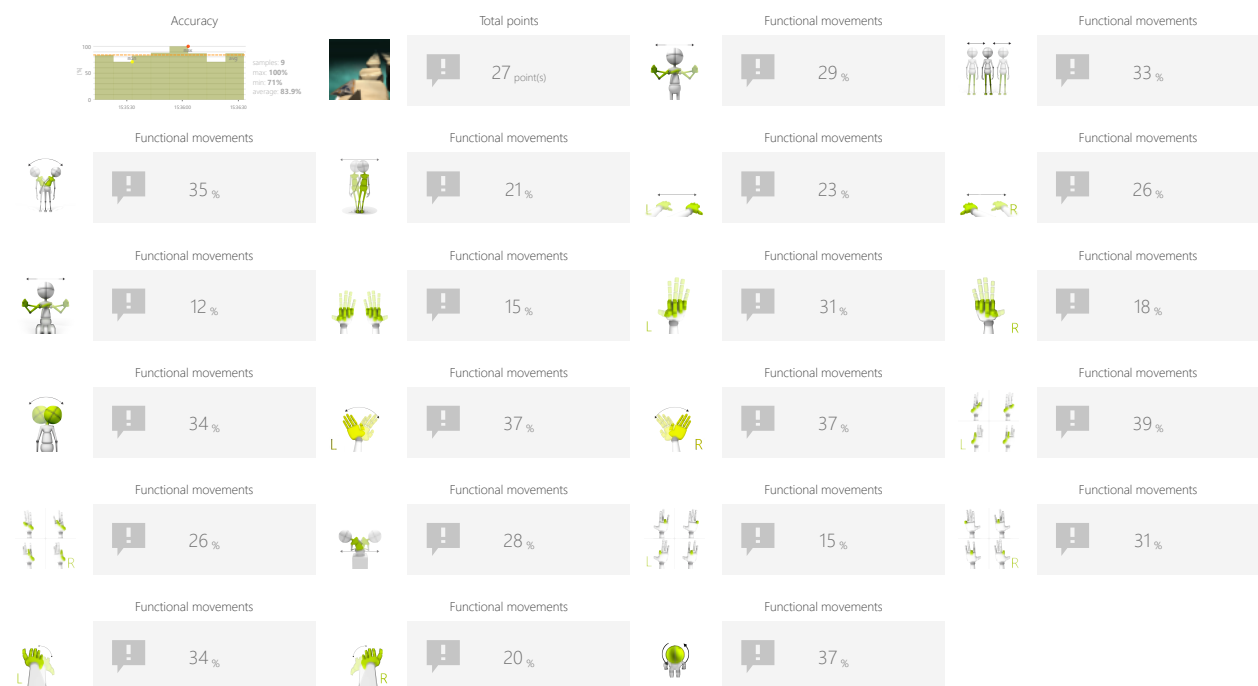
## STONES

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
- Range

## OBJECTIVES

- Perceptivity
- Dynamics of planned movements
- Reaction to the positive visual stimuli
- Response to negative visual stimuli

## INSTRUCTION FOR PATIENT


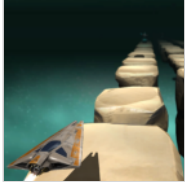
Make the the spaceship collect the colorful creatures and avoid the rocks.





## SAMPLE SETTINGS





◀

Difficulty  
**1/3**

▶

Speed

< 100% >


speed set automatically

Duration

< 90s >

Range

< 20% ↔ 80% >







# FUNCTIONAL MOVEMENTS

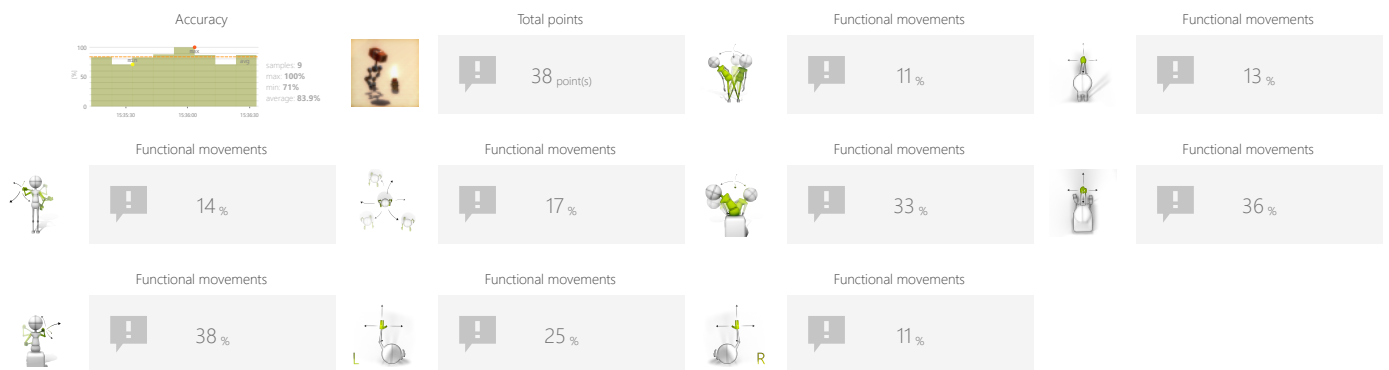
## HAMMER

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

- Positions to have targets on
- Task duration
- Range
- Time to react
- Reticle size

## OBJECTIVES

- Planning and Strategy
- Speed of decision making

## INSTRUCTION FOR PATIENT


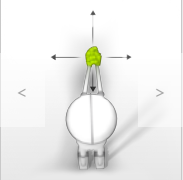




Hit the burning barrels as quickly as you can. Then return to the center.





## SAMPLE SETTINGS



		
	Difficulty <b>1/3</b>	
Active positions 		Duration < 90s >
Range 0% 100% 		Time to react < 10s >
		Reticle size < 125% >





# FUNCTIONAL MOVEMENTS

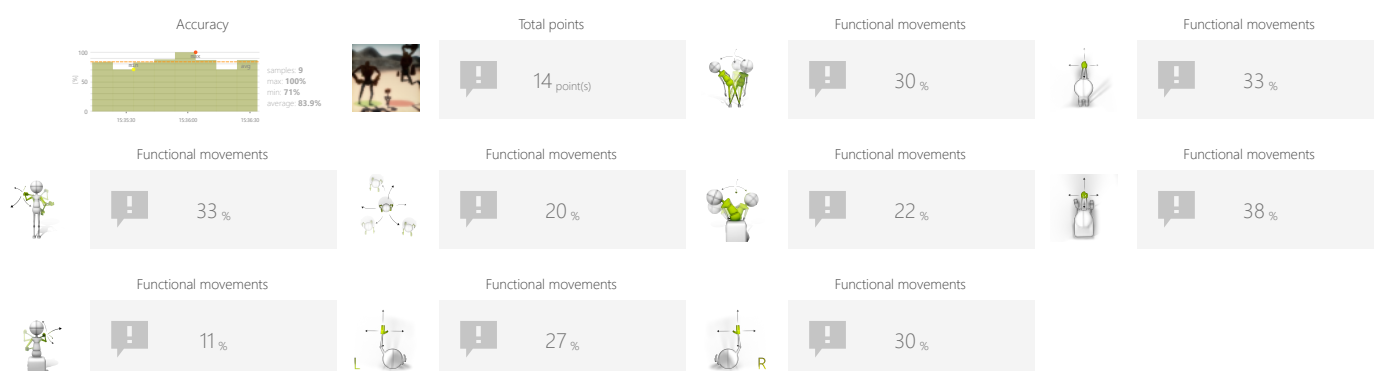
## RUNAWAY

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
- Range
- Number of enemies
- Enemies speed

## OBJECTIVES

- Predicting the trajectory of objects in 3D space
- Response to negative visual stimuli
- Focusing
- Perceptivity

## INSTRUCTION FOR PATIENT

Keep away from the big robots.

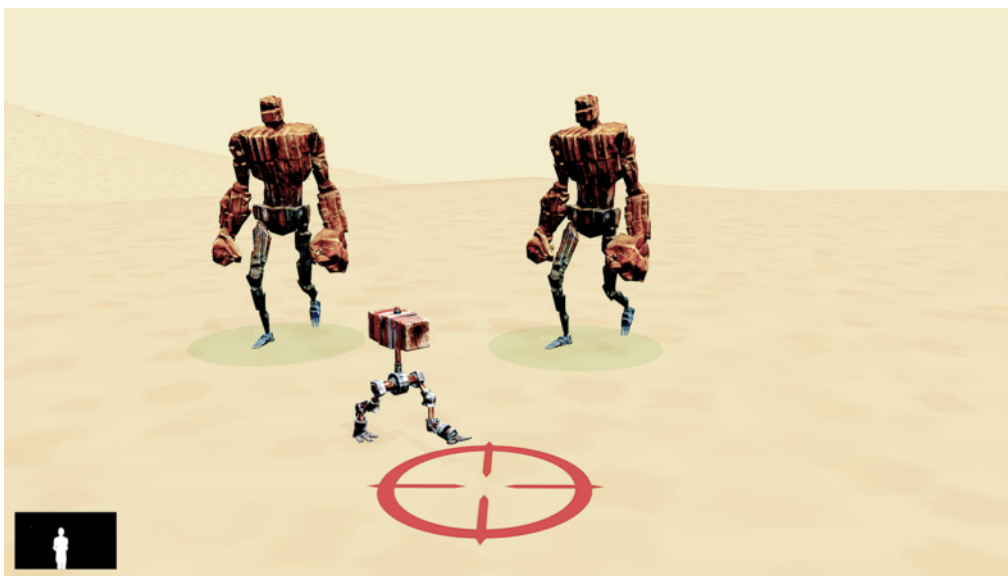


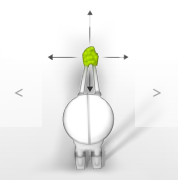



# FUNCTIONAL MOVEMENTS

RUNAWAY

## SAMPLE SETTINGS





◀

Difficulty

▶

1/3

◀

Duration

▶

90s

◀

Range

▶

0% 100%

◀

Number of enemies

▶

2



◀

Enemies speed

▶

100%





◀

Difficulty

▶

custom

◀

Duration

▶

90s

◀

Range

▶

20% 80%

◀

Number of enemies

▶

4

◀

Enemies speed

▶

100%



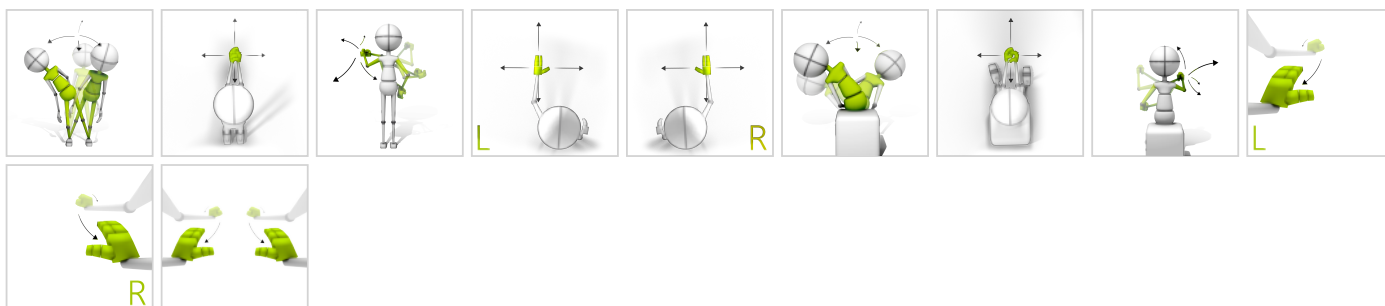


# FUNCTIONAL MOVEMENTS

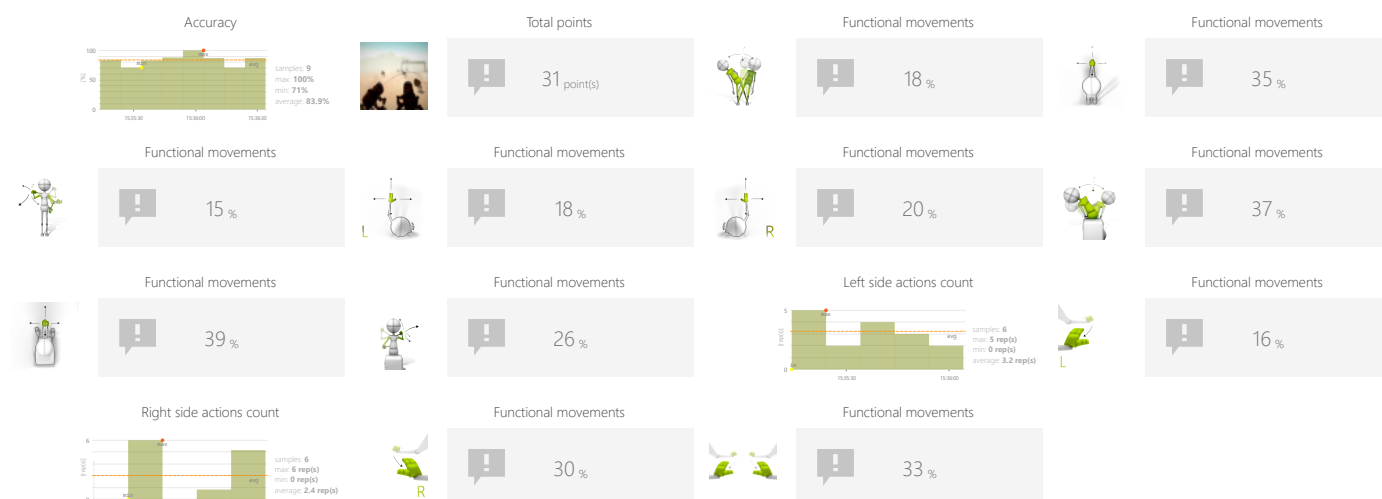
## CANNON

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
- Range
- Time between cannonballs
- Time between enemies
- Enemies speed

## OBJECTIVES

- Planning and Strategy
- Movement precision
- Predicting the trajectory of objects

## INSTRUCTION FOR PATIENT

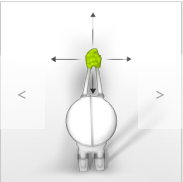

Use the cannon(s) to shoot into the robots coming in your direction.





### SAMPLE SETTINGS





◀

Difficulty

▶

1/3

◀

Duration

▶

90s

◀

Range

▶

0% 100%

◀

Time between cannonballs

▶

2s

◀

Time between enemies

▶

4s

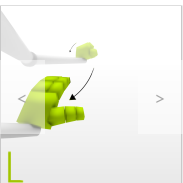

◀

Enemies speed

▶

50%





◀

Difficulty

▶

custom

◀

Duration

▶

90s

◀

Time between enemies

▶

4s

◀

Enemies speed

▶

100%



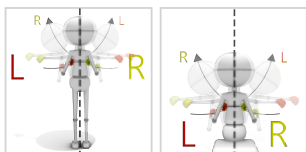


# FUNCTIONAL MOVEMENTS

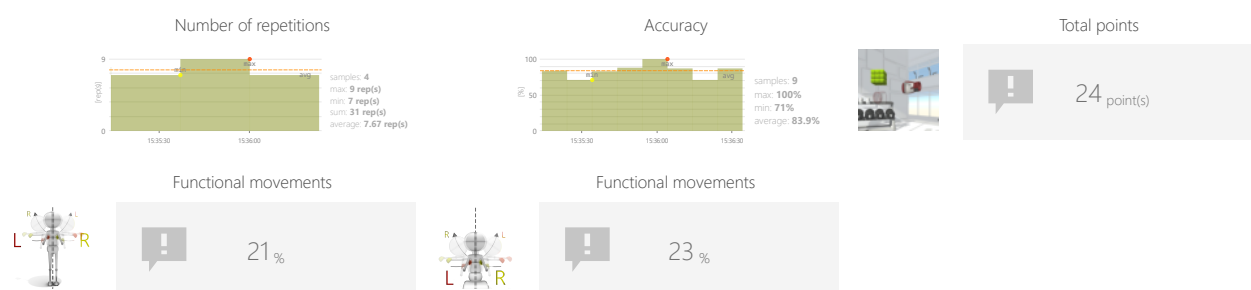
## CROSS PUNCHER

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
- Time to react
- Distance to targets

## OBJECTIVES

- Crossing the midline
- Speed of movement
- Rhythmicity
- Repetitive movements

## INSTRUCTION FOR PATIENT

Hit green cubes as fast as you can and remember to always cross your punches and kicks.

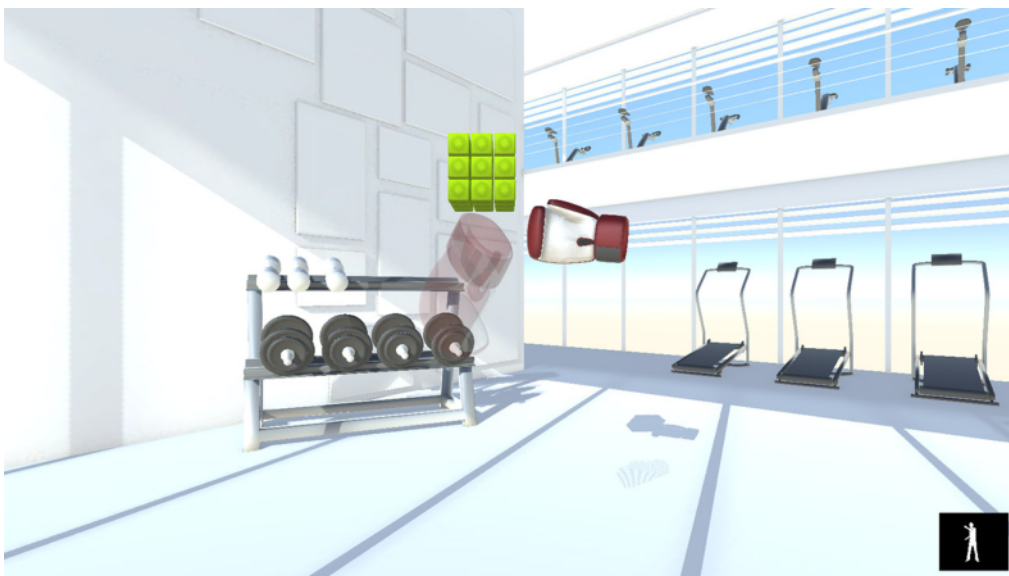




# FUNCTIONAL MOVEMENTS

CROSS PUNCHER

## SAMPLE SETTINGS



	Difficulty <b>1/3</b>	
Duration < 30s >		Time to react < 3s >
Distance to targets < 75% >		



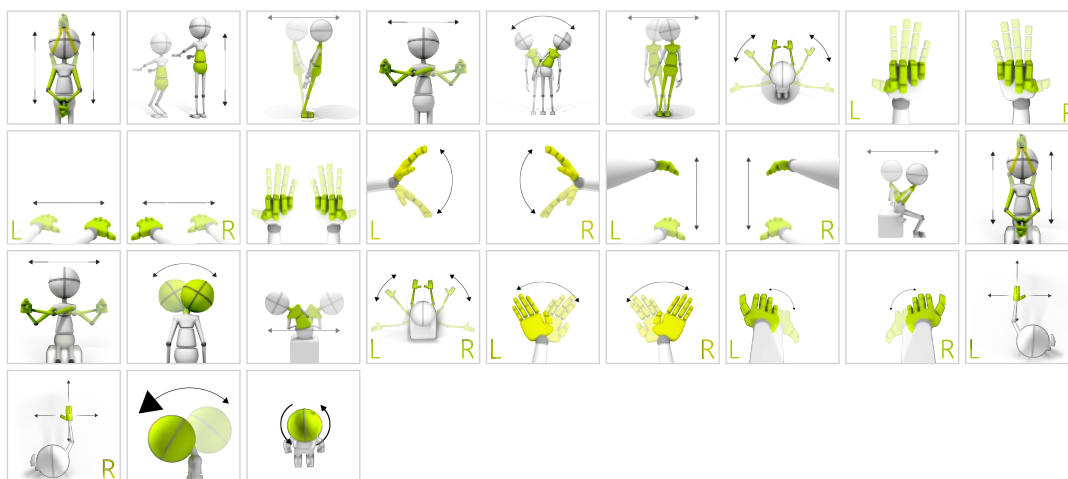


# FUNCTIONAL MOVEMENTS

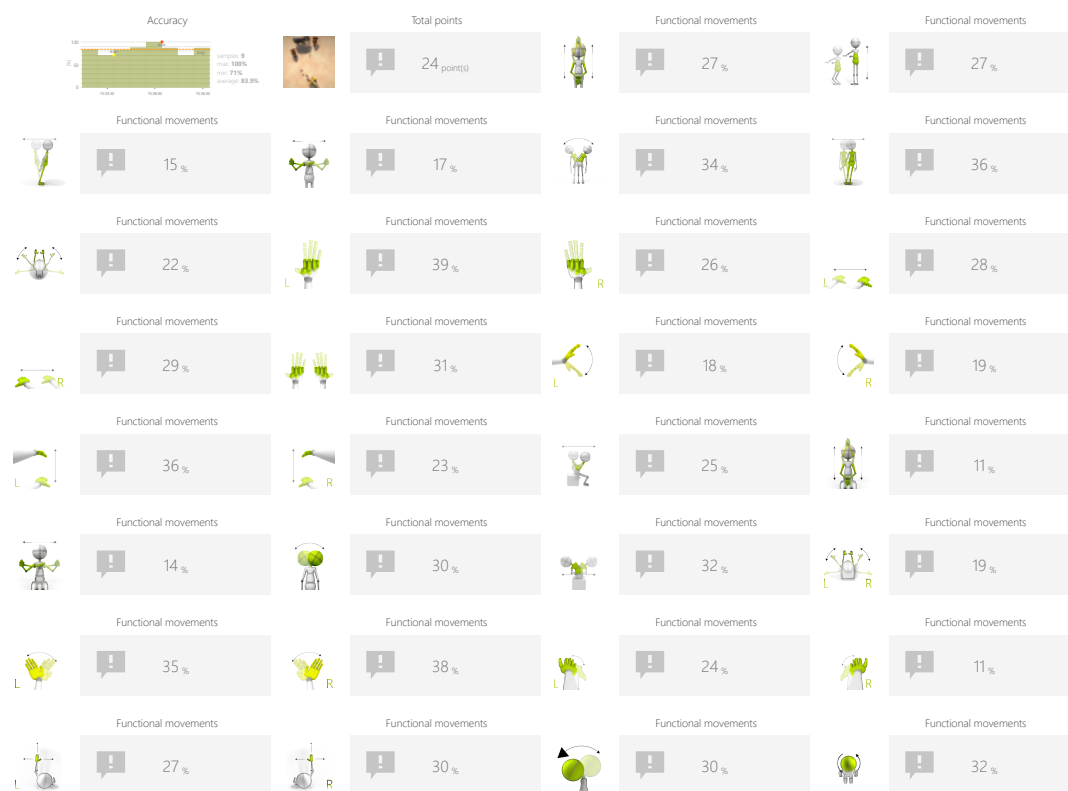
## AUTOMATIC CANNON

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
- Range
- Enable distractors
- Time between cannonballs
- Time between enemies
- Enemies speed

## OBJECTIVES

- Divided attention
- Spontaneous movements
- Predicting the trajectory of objects

## INSTRUCTION FOR PATIENT

Control cannon(s) to destroy robots, but avoid hitting the elephant!

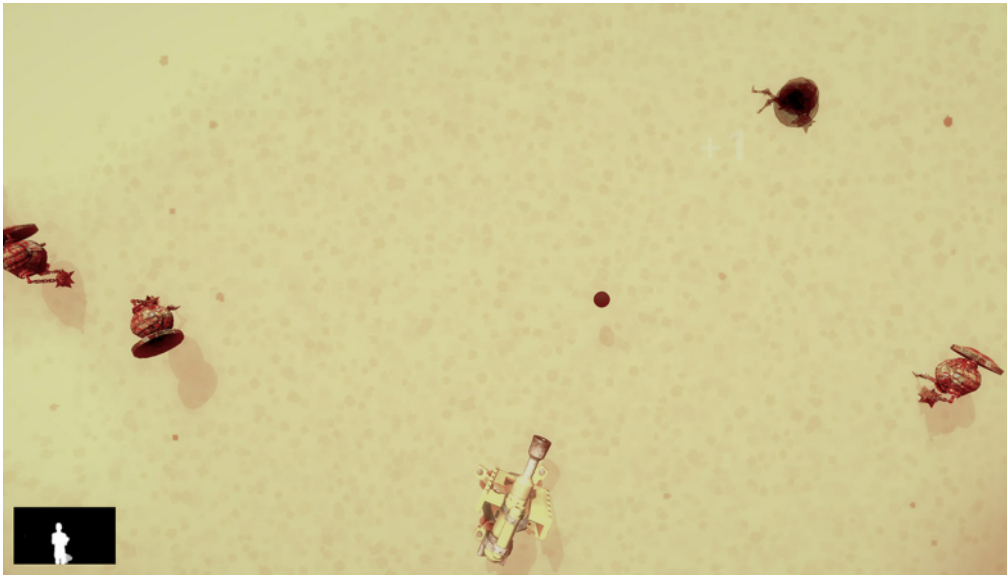




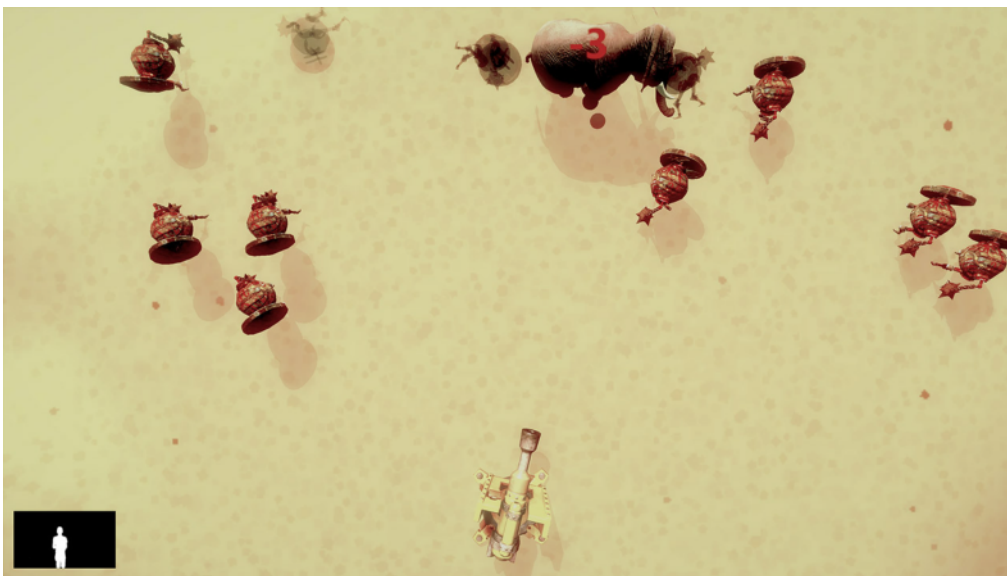
# FUNCTIONAL MOVEMENTS

AUTOMATIC CANNON

## SAMPLE SETTINGS



◀	Difficulty <b>1/3</b>	▶
Duration 90s		Range 20% ↔ 80%
Enable distractors No		Time between cannonballs 1s
Time between enemies 3s		Enemies speed 50%



◀	Difficulty <b>custom</b>	▶
Duration 90s		Range 20% ↔ 80%
Enable distractors Yes		Time between cannonballs 1s
Time between enemies 3s		Enemies speed 50%



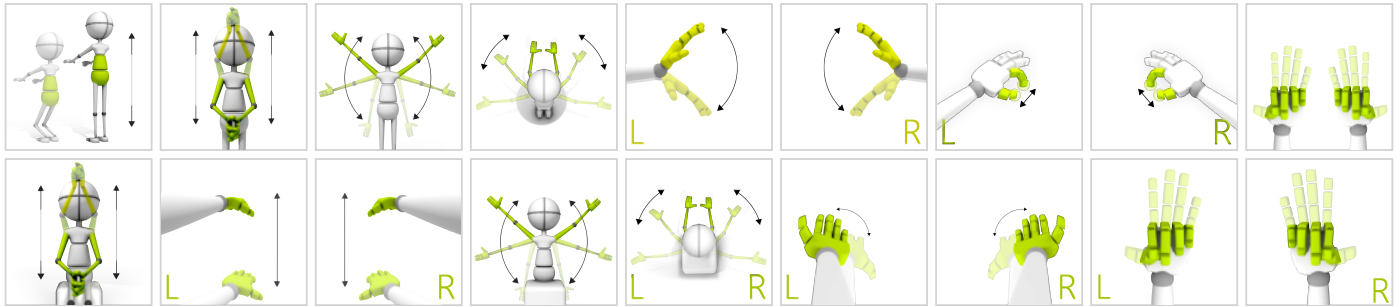


# FUNCTIONAL MOVEMENTS

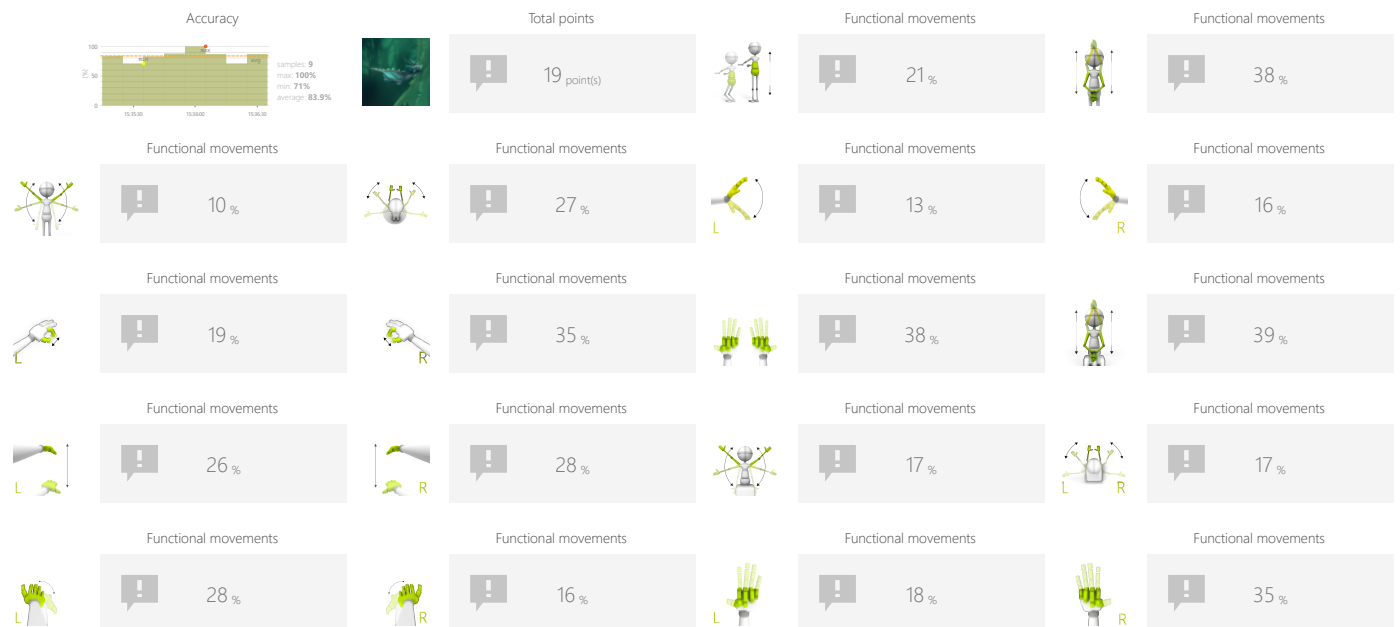
## DRAGON

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
- Range
- Coins group size
- Distance between coins
- Gravity force

## 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	▶
custom		
Duration		Range
◀ 90s ▶		20% 80%
Coins group size		Distance between coins
◀ 3 ▶		◀ 250% ▶
Gravity force		
◀ 100% ▶		



◀	Difficulty	▶
1/3		
Duration		Range
◀ 90s ▶		20% 80%
Coins group size		Distance between coins
◀ 5 ▶		◀ 250% ▶
Gravity force		
◀ 100% ▶		



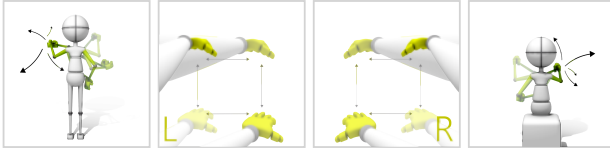


# FUNCTIONAL MOVEMENTS

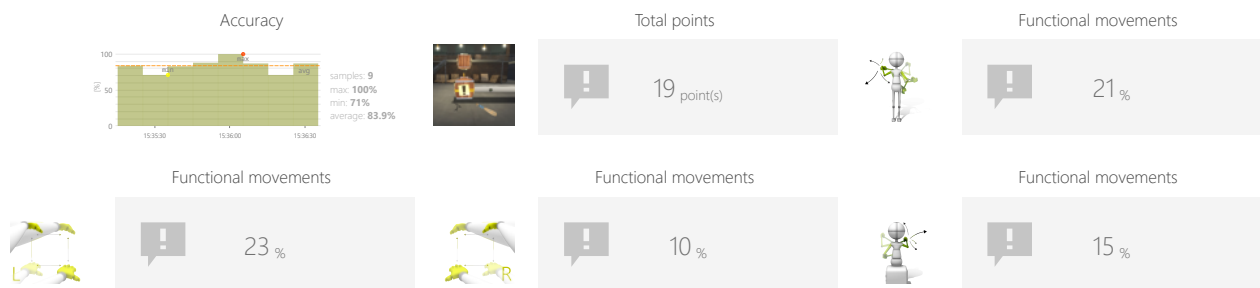
## BOX CRUSHER

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

- Positions to have targets on
- Task duration
- Range
- Required force

## OBJECTIVES

- 3D space movements reproduction
- Movement awareness
- Muscle strengthening
- Repetitive movements

## INSTRUCTION FOR PATIENT

Smash boxes with the club.









# FUNCTIONAL MOVEMENTS

BOX CRUSHER

## SAMPLE SETTINGS





◀	Difficulty <b>1/3</b>	▶
Active positions 		Duration < 90s >
Range 20% ↔ 80% 		Required force < 50% >



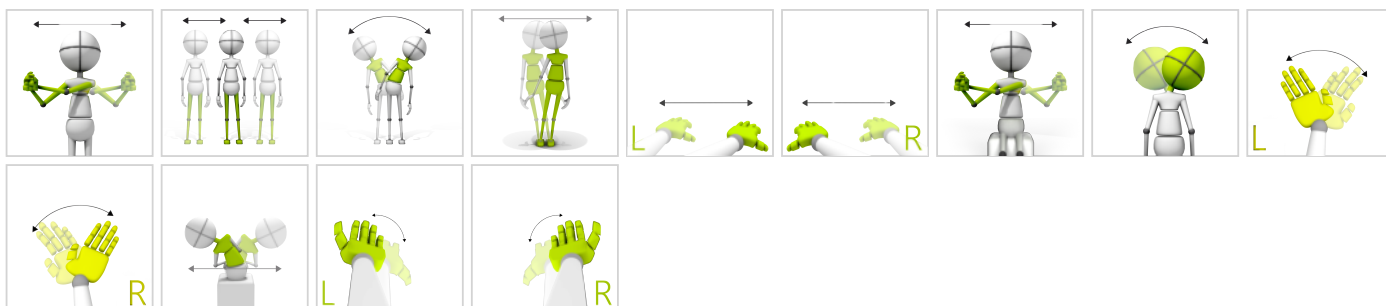


# FUNCTIONAL MOVEMENTS

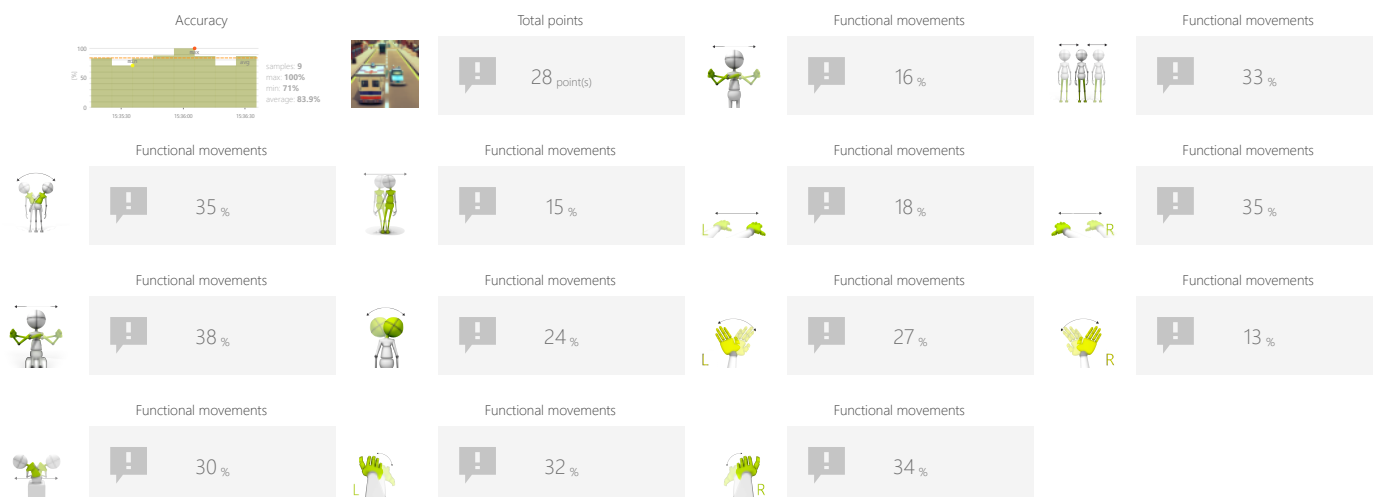
## AMBULANCE

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



## ADJUSTMENTS

- Speed
- Task duration
- Range
- Distance between cars

## OBJECTIVES

- 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.







# FUNCTIONAL MOVEMENTS

## AMBULANCE

### SAMPLE SETTINGS





Difficulty

**2/3**

Speed

**50%**

speed set automatically

Duration

**90s**



Range

**20% ↔ 80%**

Distance between cars

**50%**





Difficulty

**custom**

Speed

**50%**

speed set automatically

Duration

**90s**

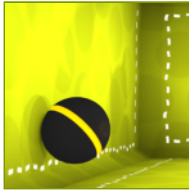
Range

**20% ↔ 80%**

Distance between cars

**200%**



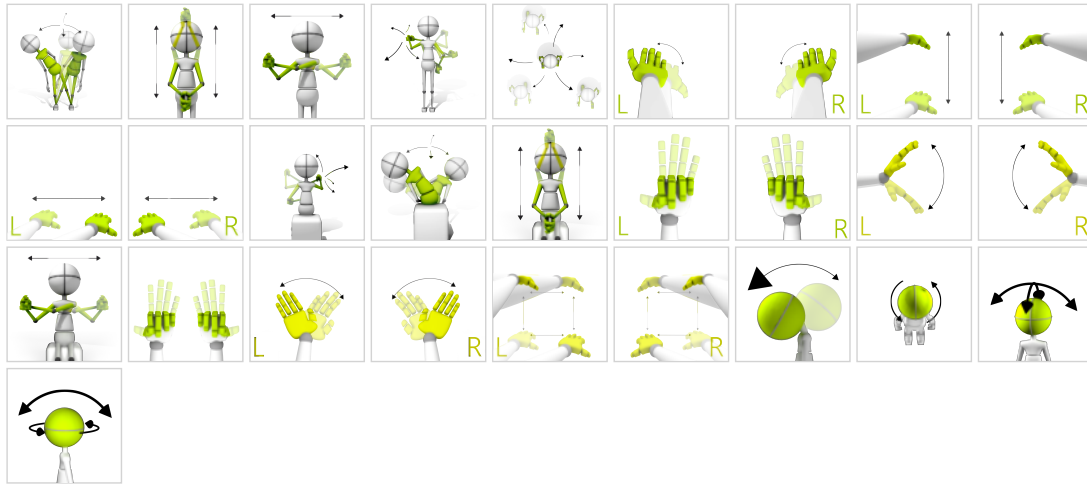


# FUNCTIONAL MOVEMENTS

## ARCANOID

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
- Range
- Reticle size
- Speed of objects

## OBJECTIVES

- Dynamics of planned movements
- Predicting the trajectory of objects in 3D space
- Visual motor coordination

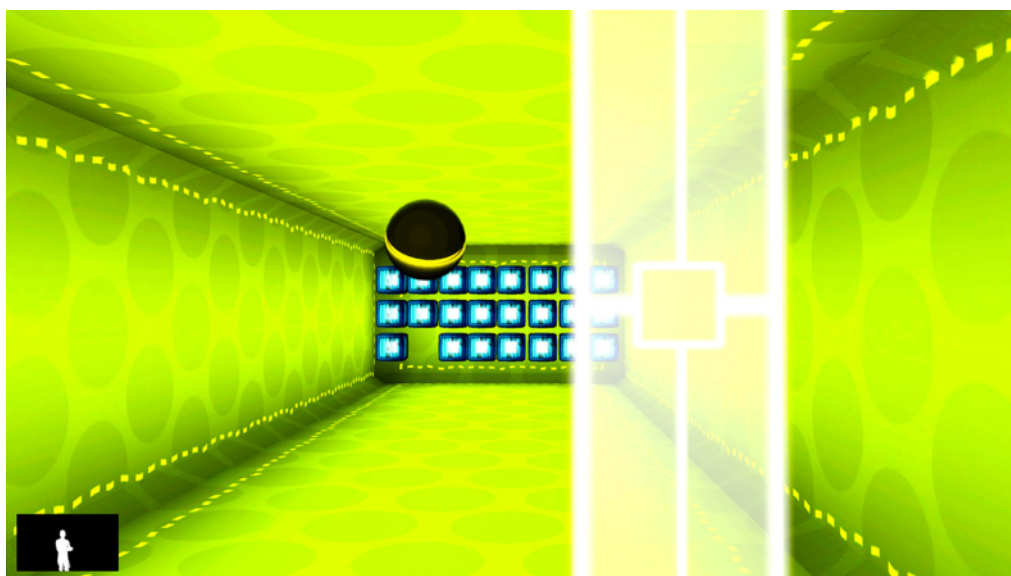
## INSTRUCTION FOR PATIENT

Destroy as many boxes as you can.

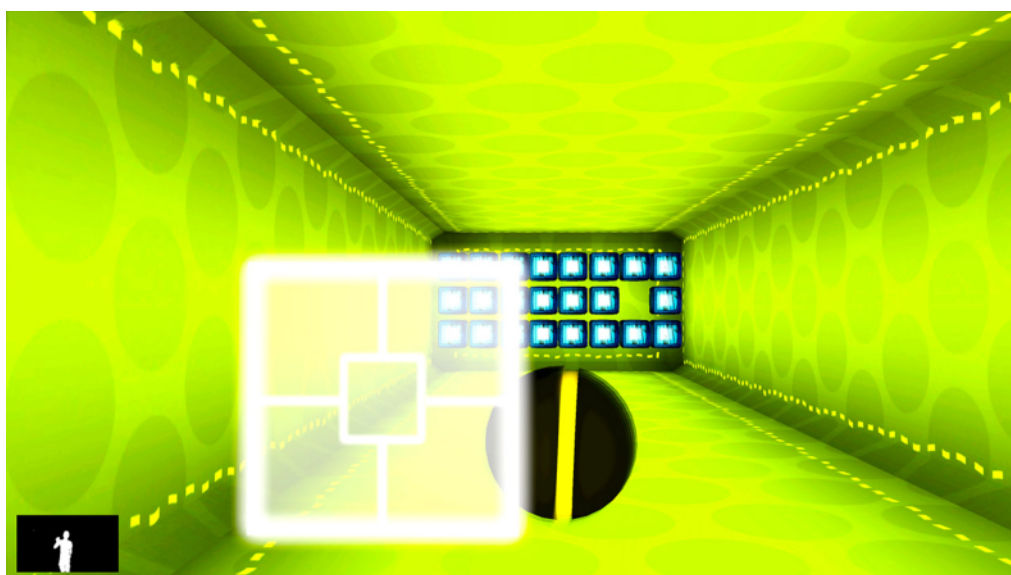




## SAMPLE SETTINGS

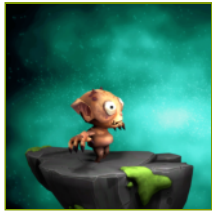


Difficulty	custom
Duration	90s
Range	20% ↔ 80%
Reticle size	100%
Speed of objects	70%



Difficulty	custom
Duration	90s
Range	80% ↔ 20%
Reticle size	75%
Speed of objects	70%



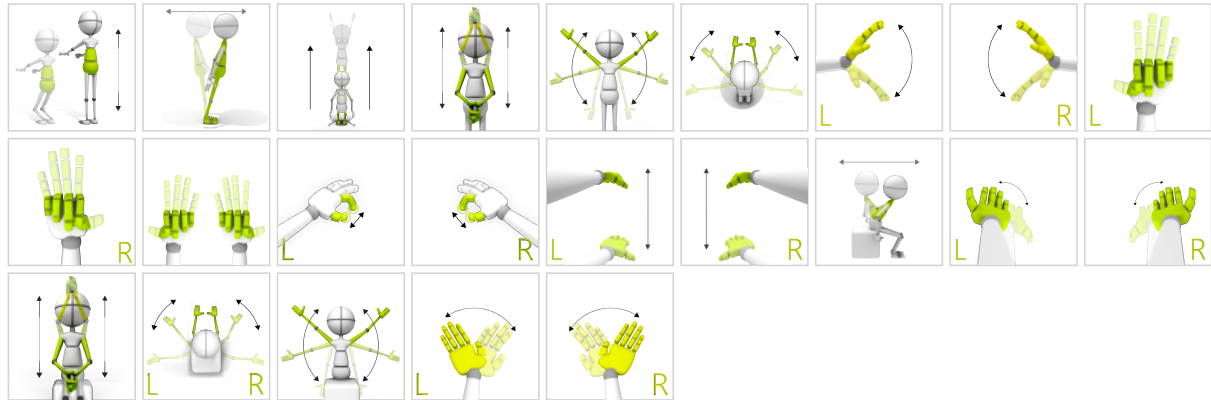


# FUNCTIONAL MOVEMENTS

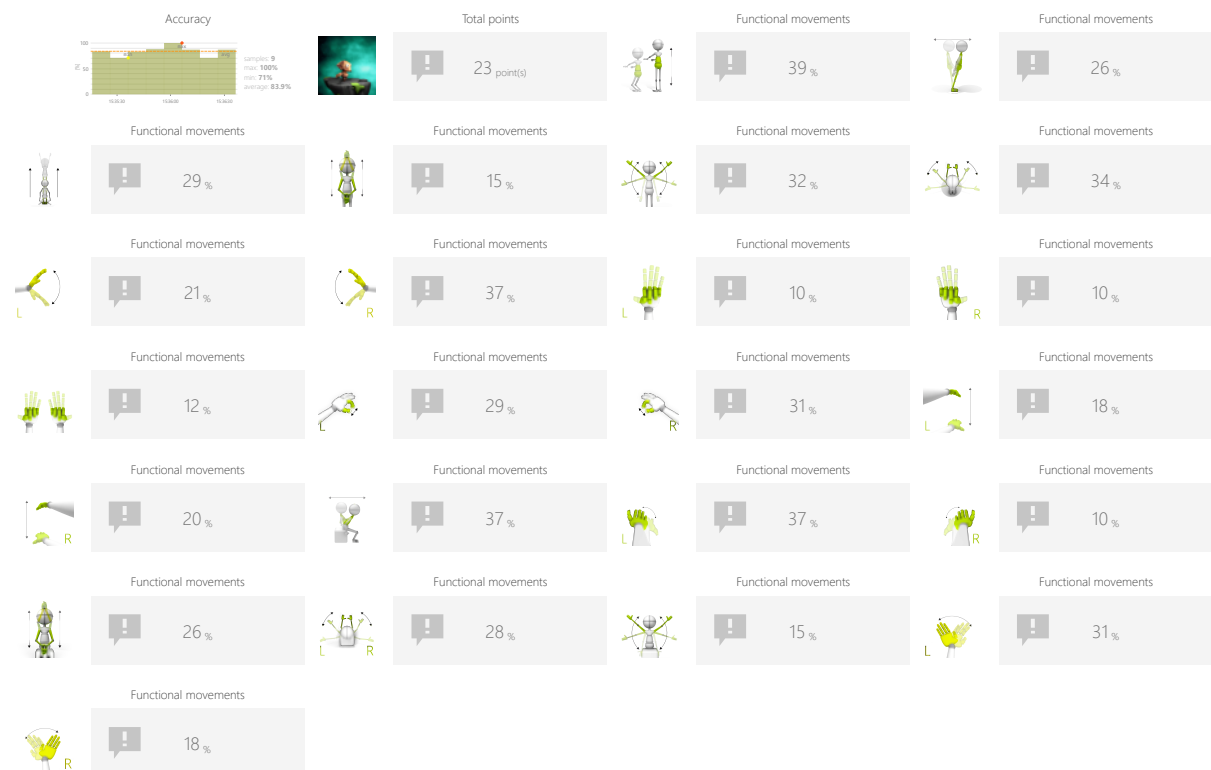
## ROCKET JUMPING

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
- Range
- Time between objects
- Bomb format
- Speed of objects

### OBJECTIVES

- Spontaneous movements
- Dynamic responses to emerging moving targets
- Predicting the trajectory of objects

### INSTRUCTION FOR PATIENT

Help the creature jump over incoming rockets and avoid being hit.



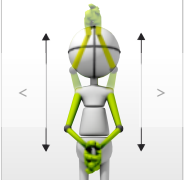
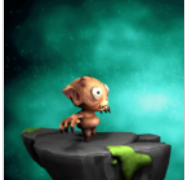


# FUNCTIONAL MOVEMENTS

## ROCKET JUMPING

### SAMPLE SETTINGS





◀

Difficulty

▶

1/3

<


Duration

>

90s

20% 80%

Range



<

Time between objects

>

5s

<

Bomb format

>

1

<

Speed of objects

>

100%



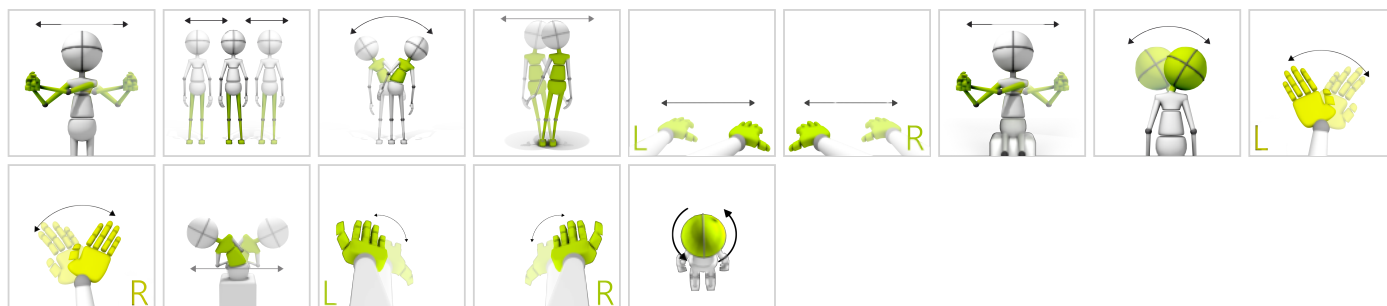


# FUNCTIONAL MOVEMENTS

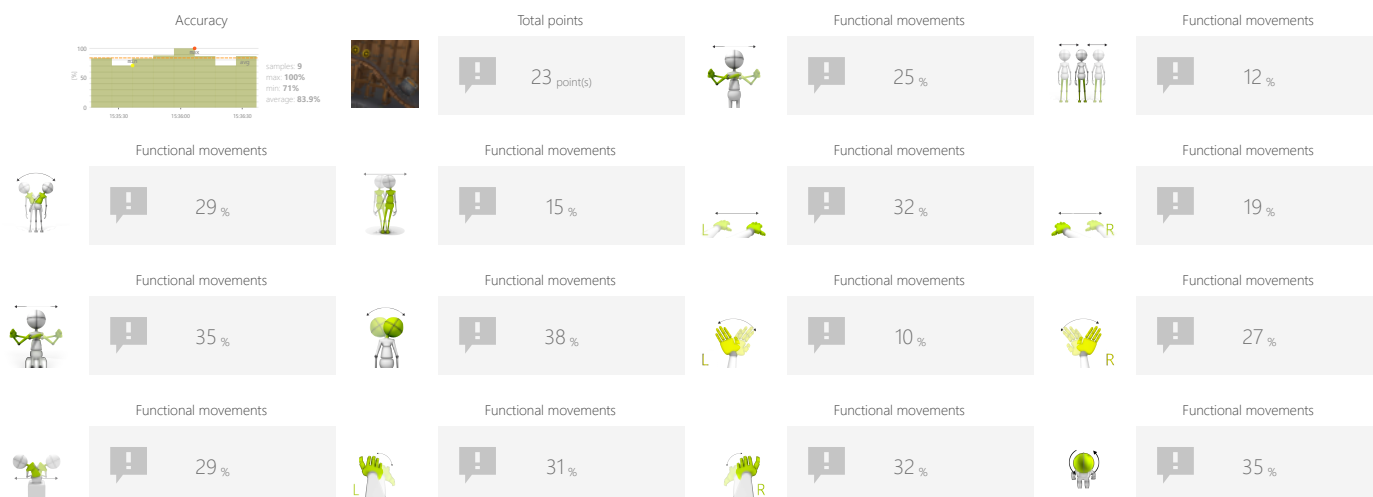
## RAILS

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
- Range
- Route shape
- Enable derailling
- Enable obstacles
- Time between objects

## OBJECTIVES

- Dynamic responses to emerging moving targets
- Predicting the trajectory of objects
- Visual motor coordination

## INSTRUCTION FOR PATIENT

Control the trolley to collect the coins.







# FUNCTIONAL MOVEMENTS

## RAILS

### SAMPLE SETTINGS





Difficulty  
**1/3**

Speed  
100%  
speed set automatically

Duration  
90s

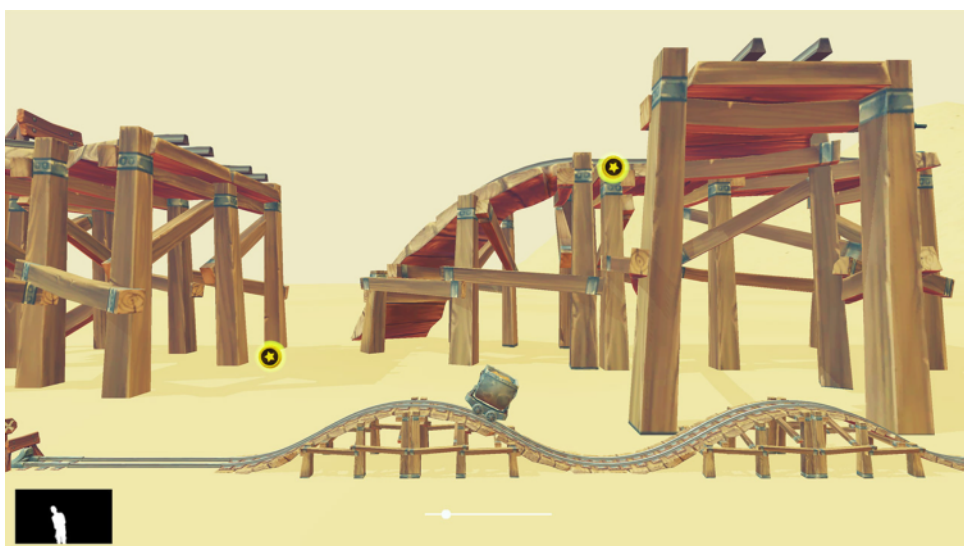
Range  
20% ↔ 80%

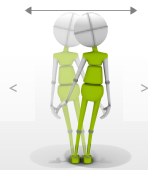

Route shape  
—

Enable derailling  
No

Enable obstacles  
No

Time between objects  
5s





Difficulty  
**custom**

Speed  
100%  
speed set automatically

Duration  
90s

Range  
20% ↔ 80%

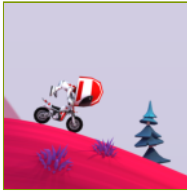
Route shape  
~

Enable derailling  
No

Enable obstacles  
No

Time between objects  
5s



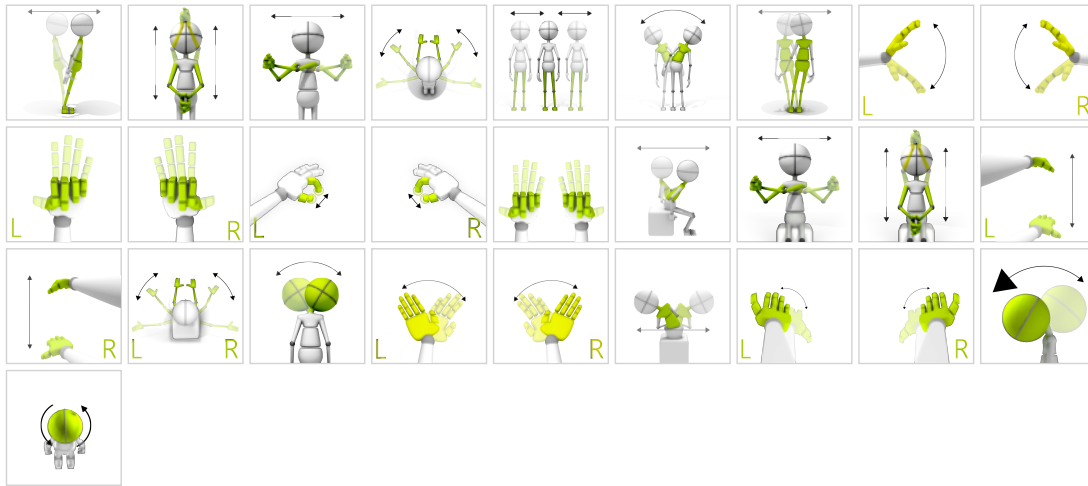


# FUNCTIONAL MOVEMENTS

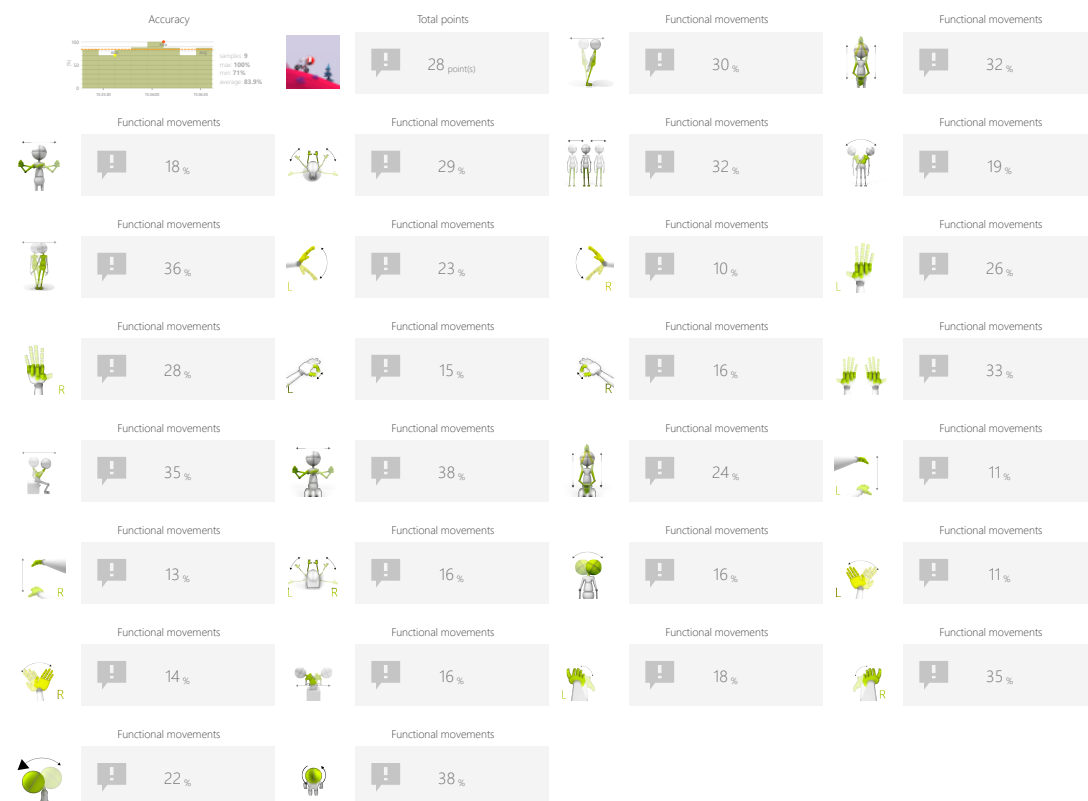
## MOTOCROSS

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
- Range
- Route shape

## OBJECTIVES

- Dynamics of planned movements
- Planning and Strategy

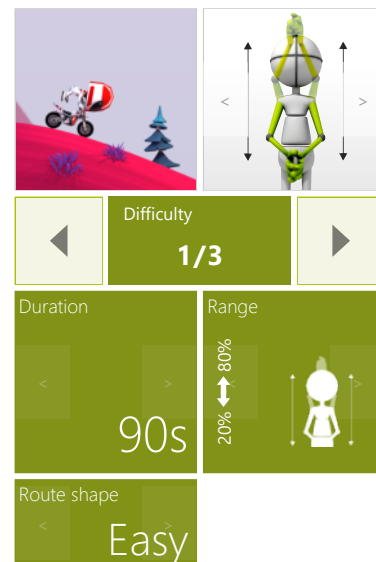
## INSTRUCTION FOR PATIENT

Accelerate and brake to cover the entire route as quickly as possible without tipping.

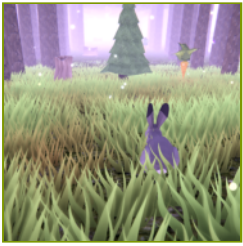




## SAMPLE SETTINGS





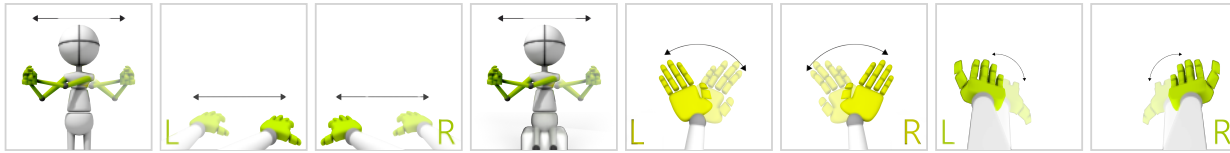


# FUNCTIONAL MOVEMENTS

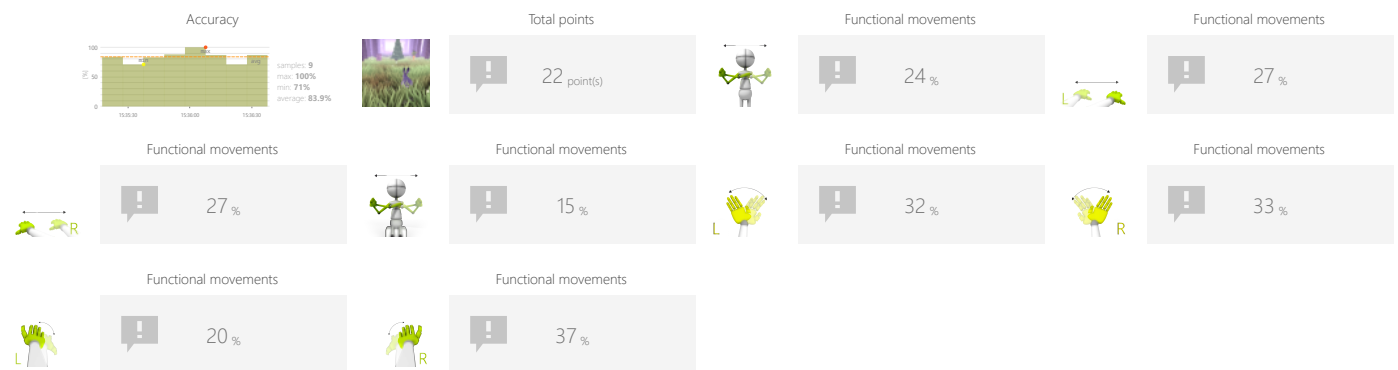
## FOREST RUNNER

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
- Range

## OBJECTIVES

- Dynamics of planned movements
- Focusing
- Planned movements
- Speed of movement

## INSTRUCTION FOR PATIENT

Keep the hare on the run, avoid obstacles and collect as many carrots as you can.

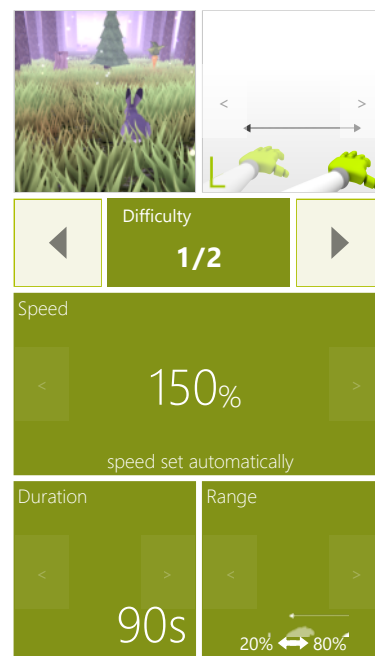




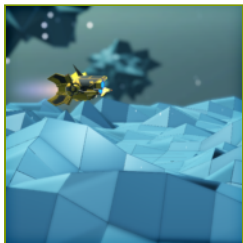
# FUNCTIONAL MOVEMENTS

## FOREST RUNNER

### SAMPLE SETTINGS





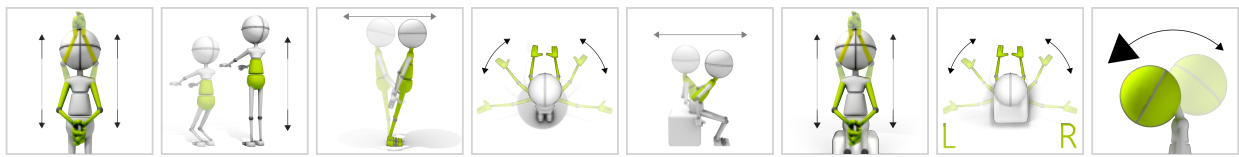


# FUNCTIONAL MOVEMENTS

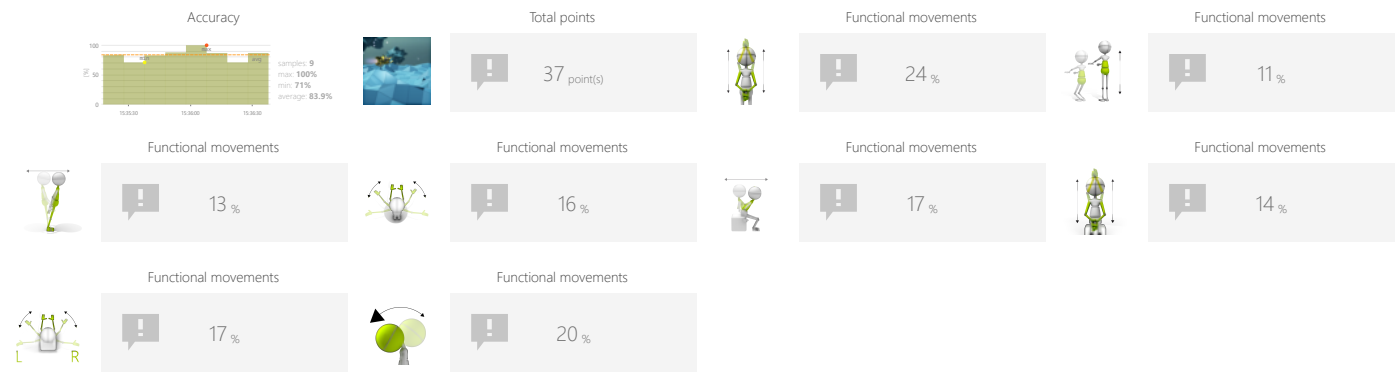
## GEOMETRY FLIER

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
- Range

### OBJECTIVES

- Dynamics of planned movements
- Activity in a given rhythm
- Visual motor coordination

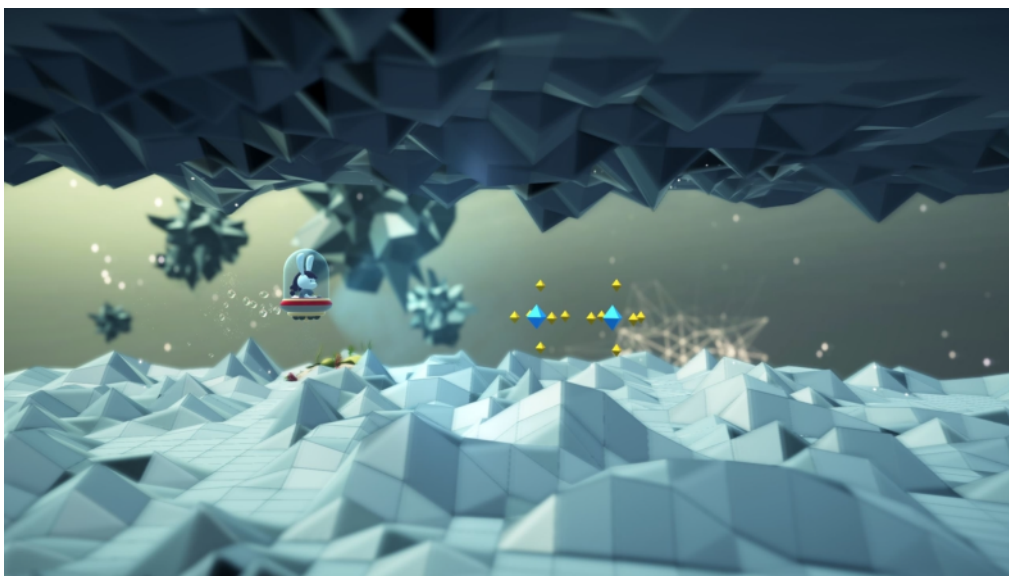
### INSTRUCTION FOR PATIENT

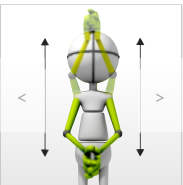

Control the vehicle to avoid the obstacles.





## SAMPLE SETTINGS





◀

Difficulty

▶

1/3

Speed

< 100% >


speed set automatically

Duration

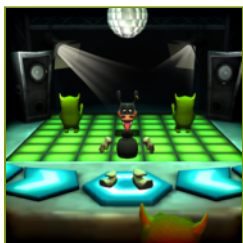
< 90s >

Range

20% 80%





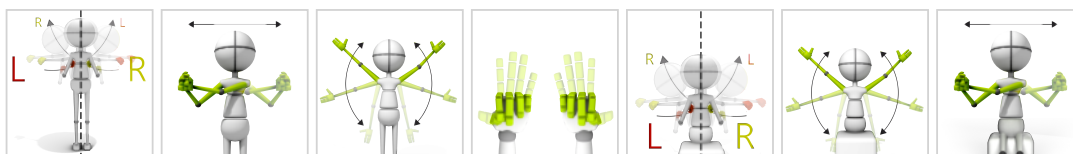


# FUNCTIONAL MOVEMENTS

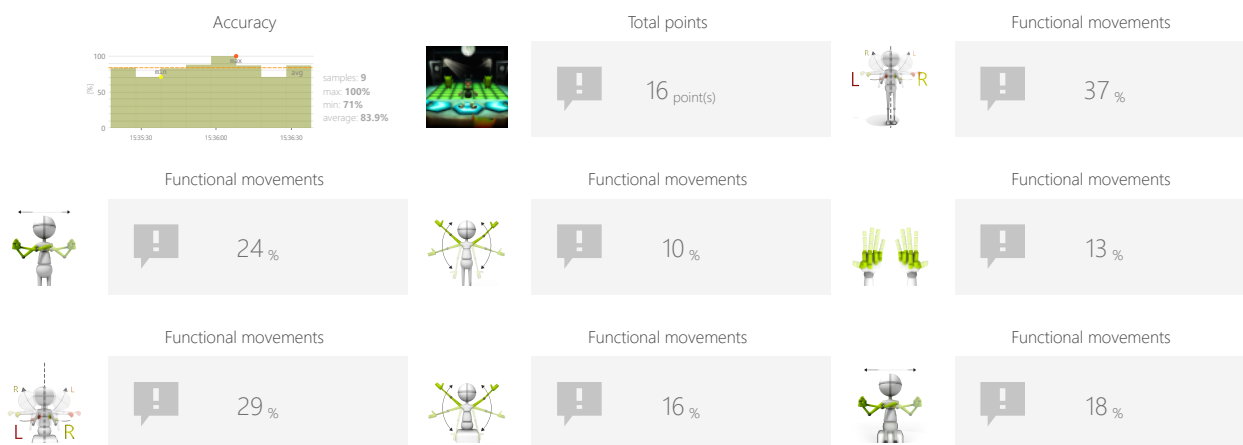
## DANCEMAN

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
- Advanced scoring
- Song index
- Spawn rate level

## OBJECTIVES

- Activity in a given rhythm
- Spontaneous movements
- Visual motor coordination

## INSTRUCTION FOR PATIENT

Hit the green characters when they come close.





# FUNCTIONAL MOVEMENTS

## DANCEMAN

### SAMPLE SETTINGS



◀	Difficulty <b>1/6</b>	▶
Duration 90s		Range 20% ↔ 80%
Advanced scoring No		Song index 0
Spawn rate level Easy		



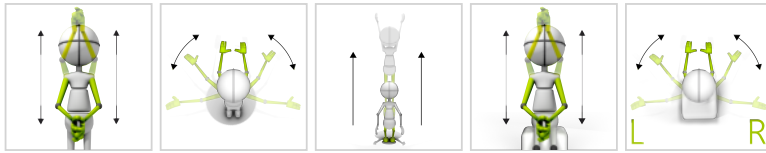


# FUNCTIONAL MOVEMENTS

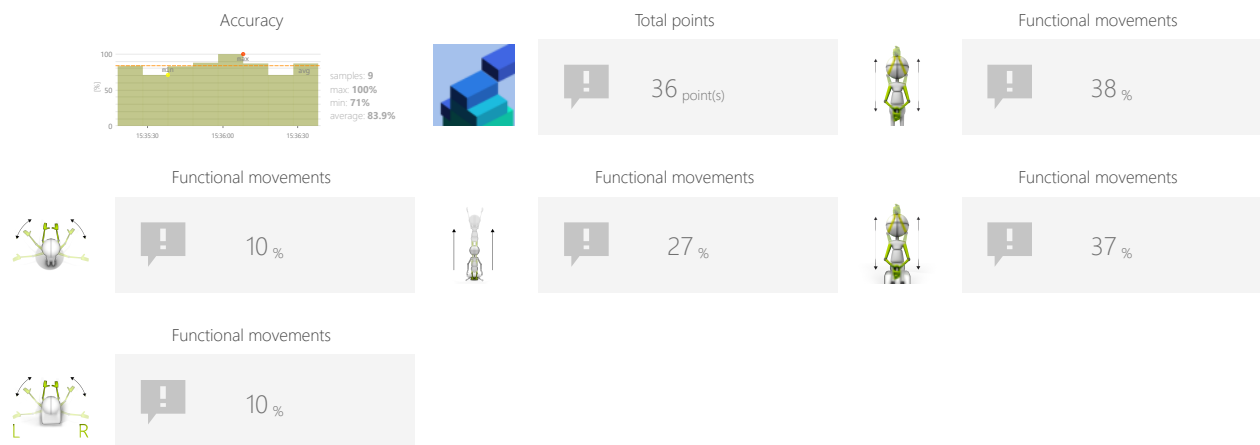
## STACK BUILDER

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
- Range
- Speed of objects

## OBJECTIVES

- Repetitive movements
- Rhythmicity
- Planned movements
- Focusing

## INSTRUCTION FOR PATIENT

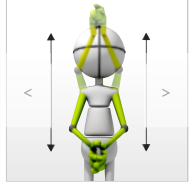

Build the highest stack possible by perfectly aligning blocks.  
Time your actions to perform the specified movement pattern when blocks are accurately positioned.





## SAMPLE SETTINGS





◀

Difficulty

▶


1/3

Duration

< 90s >

Range

20% 80%



Speed of objects

< 50% >



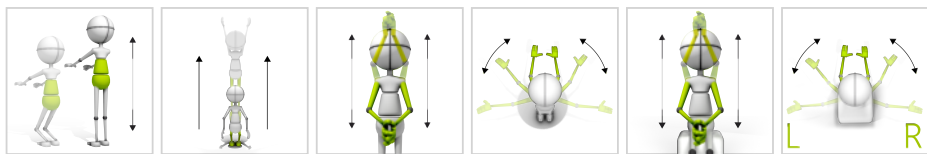


# FUNCTIONAL MOVEMENTS

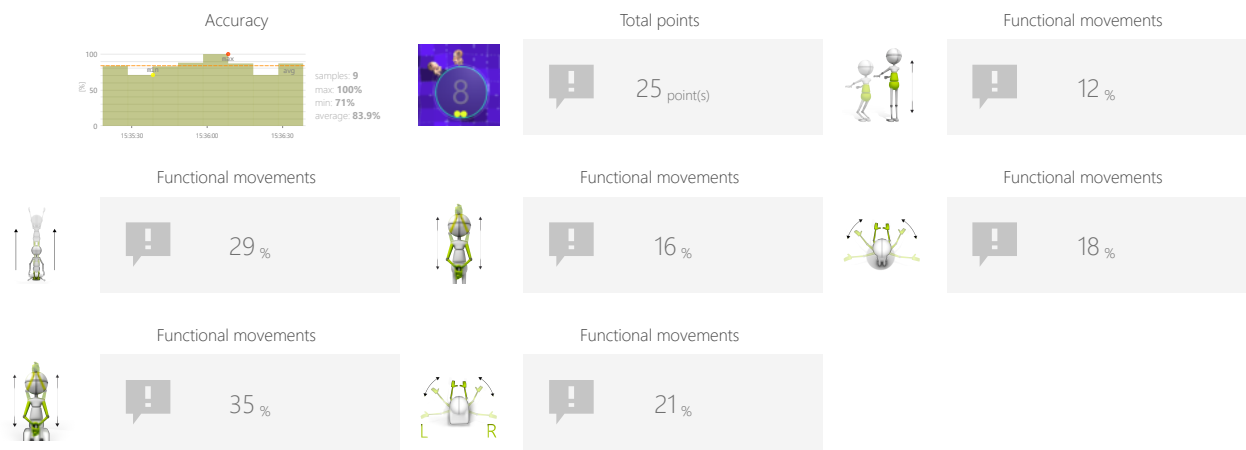
## IMP DODGE

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
- Range
- Number ofimps
- Number of targets
- Speed of objects

## OBJECTIVES

- Dynamics of planned movements
- Predicting the trajectory of objects
- Visual motor coordination
- Focusing

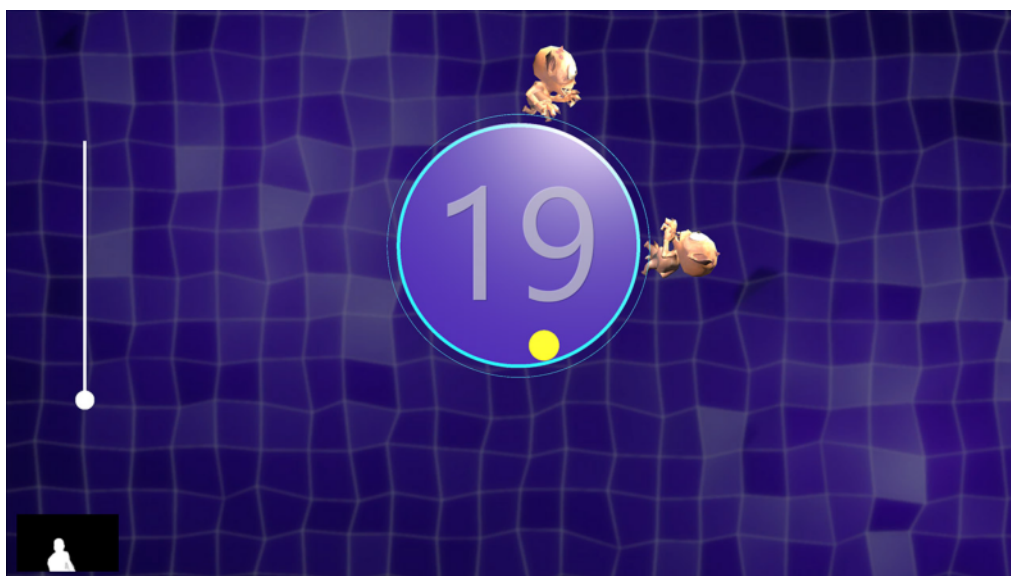
## INSTRUCTION FOR PATIENT

Shoot green balls into the circle while avoiding hittingimps.





## SAMPLE SETTINGS



Duration	Range
< 90s >	20% 80% >
Number ofimps	Number of targets
< 2 >	< 20 >
Speed of objects	
< 100% >	



Duration	Range
< 90s >	20% 80% >
Number ofimps	Number of targets
< 6 >	< 20 >
Speed of objects	
< 100% >	





# FUNCTIONAL MOVEMENTS

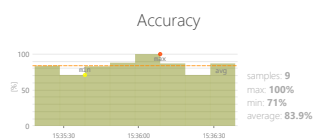
## ARCHEOLOGY

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



Total points



34 point(s)



Functional movements



22 %

## ADJUSTMENTS

- Task duration
- Stone hardness
- Hand

## OBJECTIVES

- Focusing
- Repetitive movements
- Relaxation
- Both hands grabbing

## INSTRUCTION FOR PATIENT

Position the chisel atop the stone, then strike it using the hammer. This action will break apart the stone, unveiling the hidden artifact within.





## SAMPLE SETTINGS



Difficulty	1/3
Duration	90s
Stone hardness	50%
Hand	Right



Difficulty	1/3
Duration	90s
Stone hardness	50%
Hand	Right



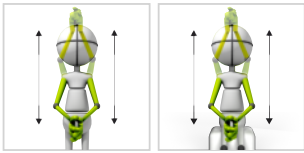


# FUNCTIONAL MOVEMENTS

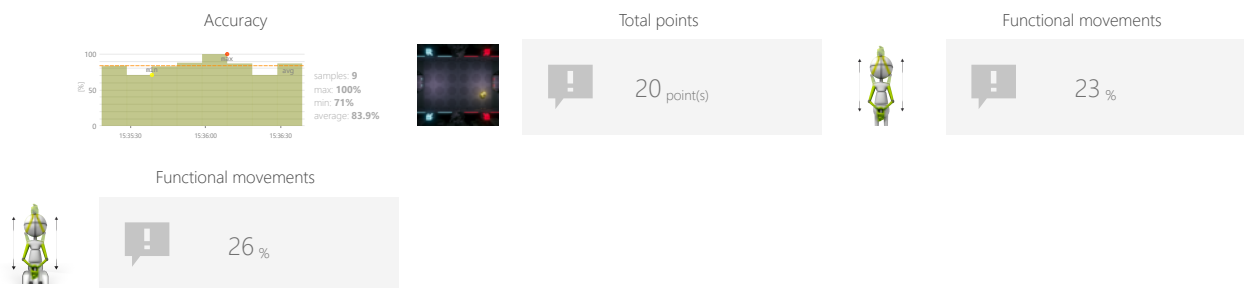
## PONG

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
- Range
- Speed of objects

## OBJECTIVES

- Planned movements
- Focusing
- Predicting the trajectory of objects

## INSTRUCTION FOR PATIENT

Use the paddles to hit a ball back and forth.

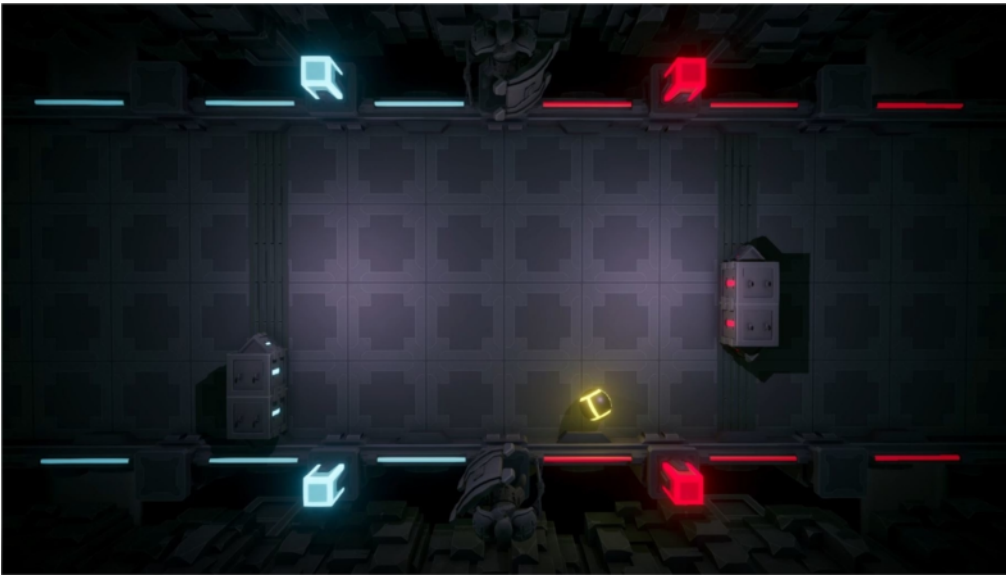


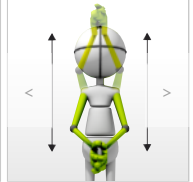



# FUNCTIONAL MOVEMENTS

## PONG

### SAMPLE SETTINGS





◀

Difficulty  
**1/3**

▶

◀


Duration  
**90s**

▶

◀

Range  
20% ↔ 80%

▶

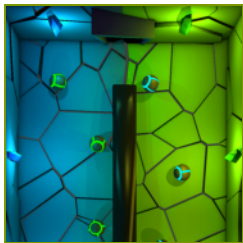


◀

Speed of objects  
**100%**

▶

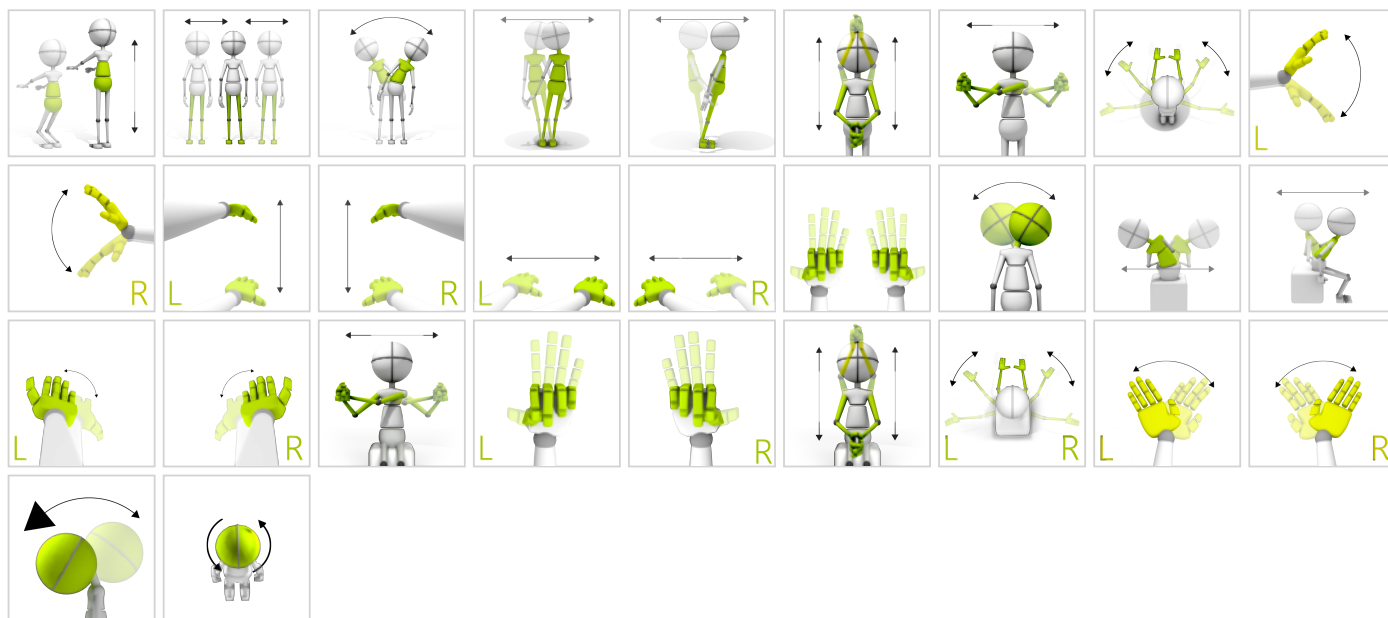




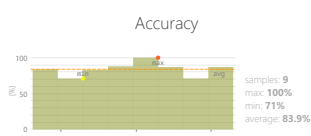
# DIVIDED ATTENTION SORTER

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



Total points

22 point(s)



Divided attention

25 %

## ADJUSTMENTS

- Task duration
- Range
- Number of objects
- Gap size
- Speed of objects

## 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.

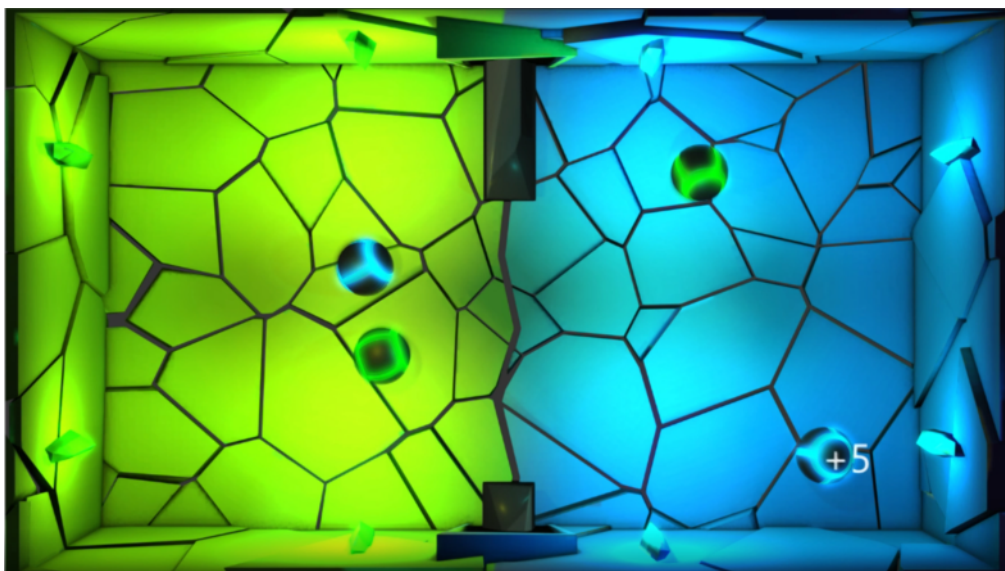


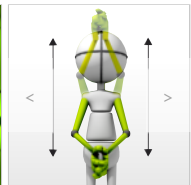
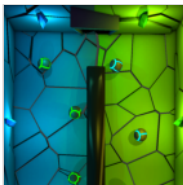


# DIVIDED ATTENTION

SORTER

## SAMPLE SETTINGS





◀

Difficulty

▶

1/3

◀

Duration

▶


90s

◀

Range

▶

20% ↔ 80%



◀

Number of objects

▶

4

◀

Gap size

▶

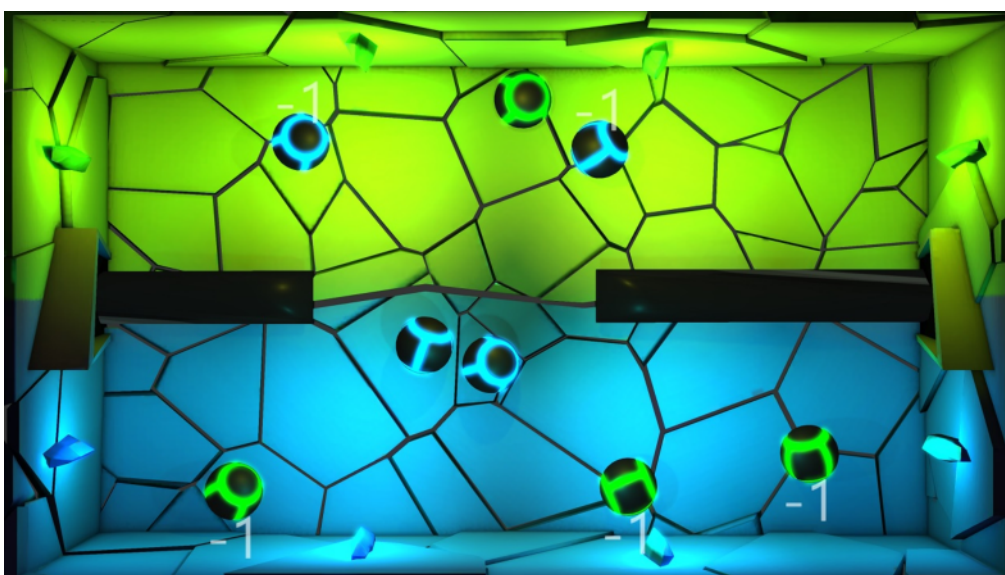
150%


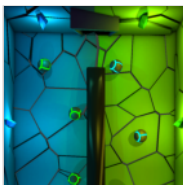
◀

Speed of objects

▶

100%





◀

Difficulty

▶

custom

◀

Duration

▶


90s

◀

Range

▶

20% ↔ 80%



◀

Number of objects

▶

8

◀

Gap size

▶

150%

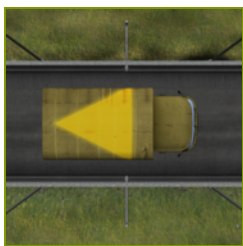
◀

Speed of objects

▶

100%

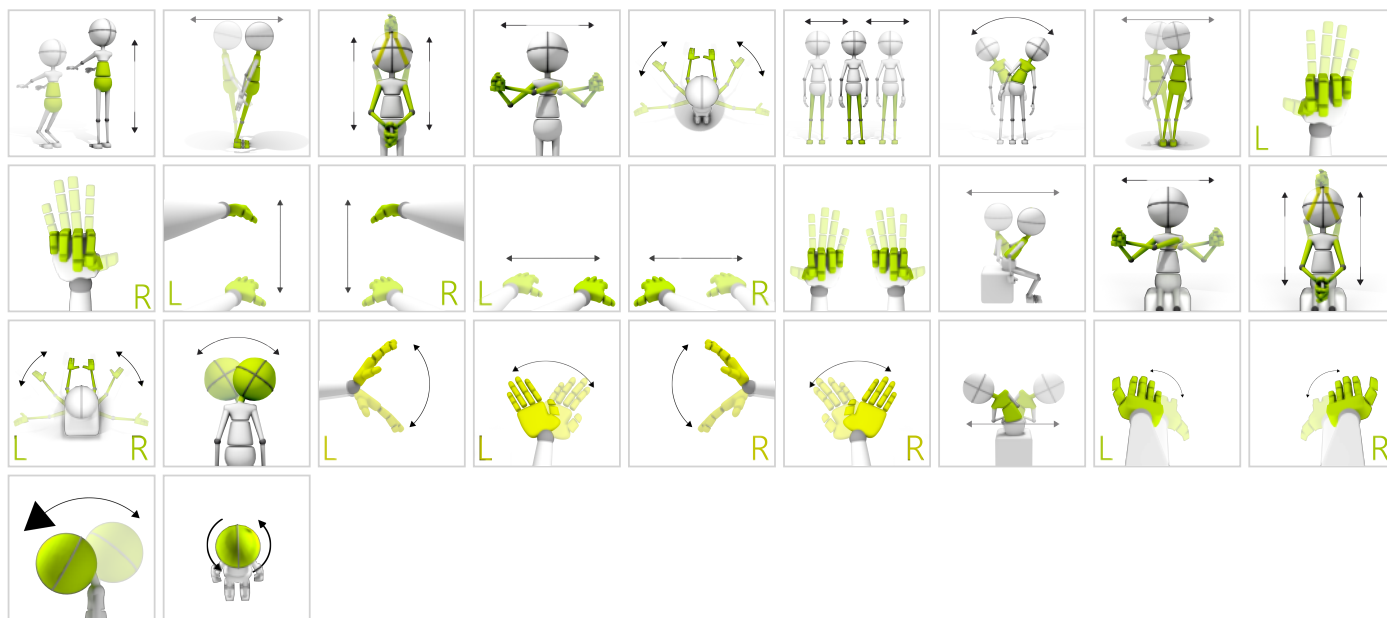




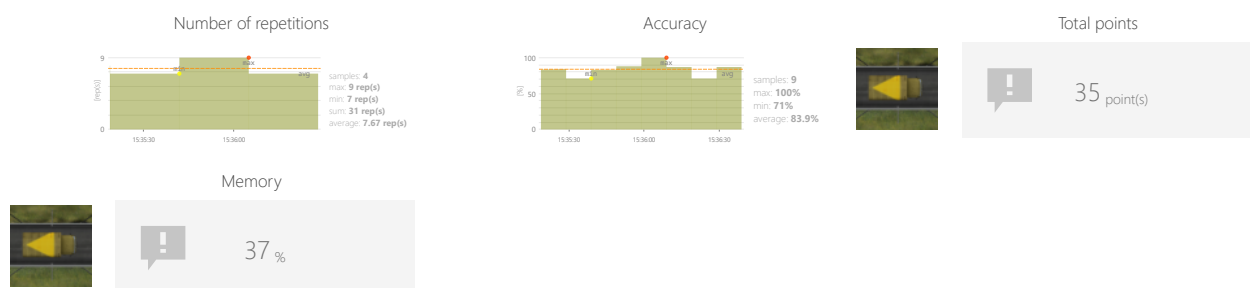
# MEMORY TRUCKS

Measure and train individual's skills to memorize information.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Variations

## OBJECTIVES

- Logical tasks
- Focusing
- Perceptivity

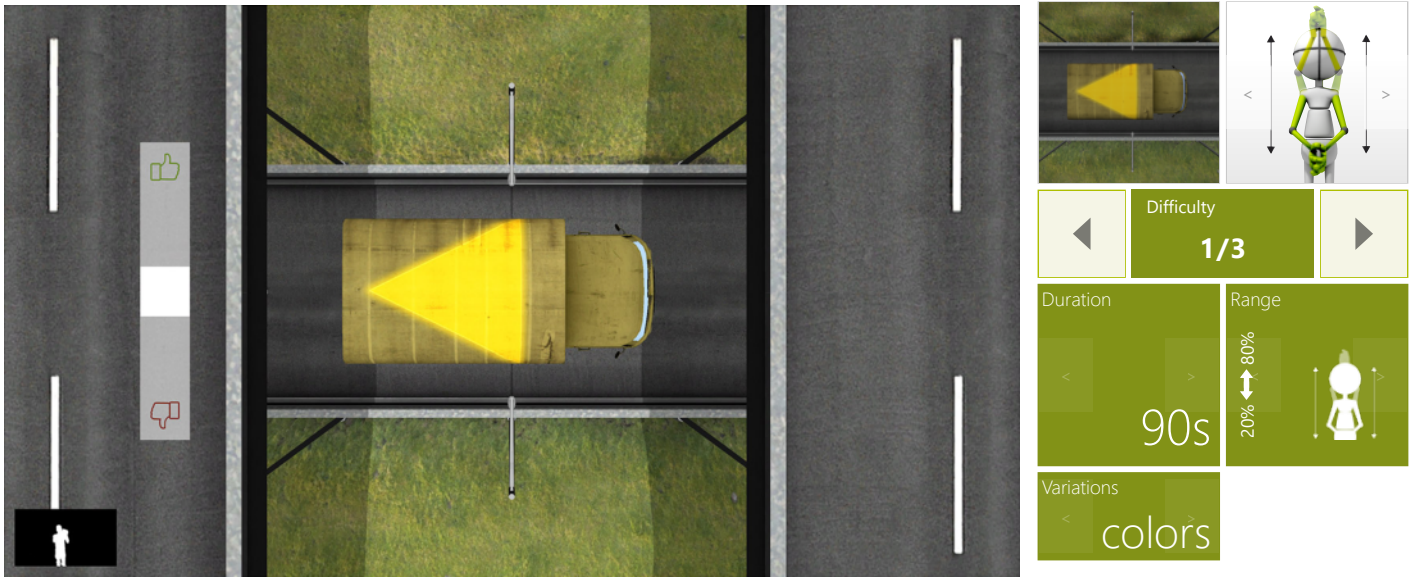
## INSTRUCTION FOR PATIENT

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





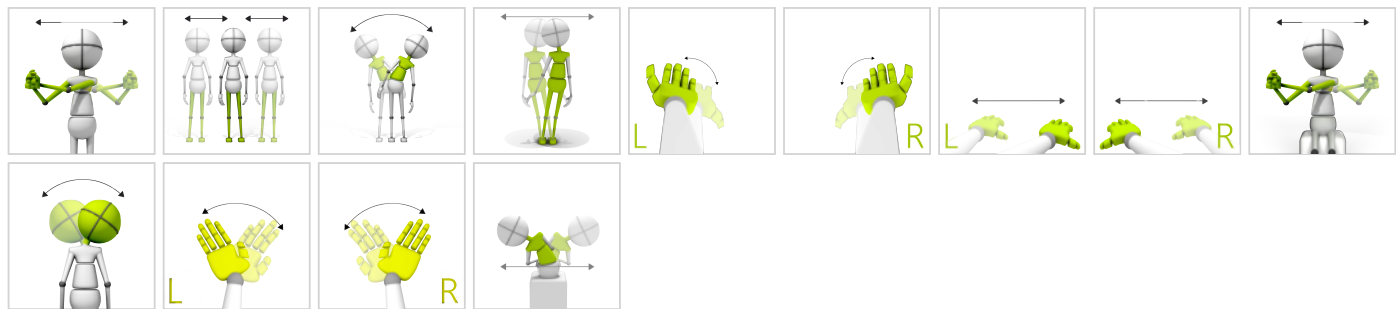


# PROBLEM SOLVING

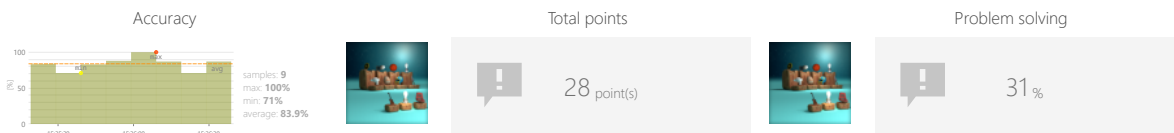
## CLONES

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



### ADJUSTMENTS

- Task duration
- Time to complete action
- Range
- Number of pairs

### OBJECTIVES

- Perceptivity
- Visual motor coordination
- Logical tasks

### INSTRUCTION FOR PATIENT

Select the item which has a pair on the screen.

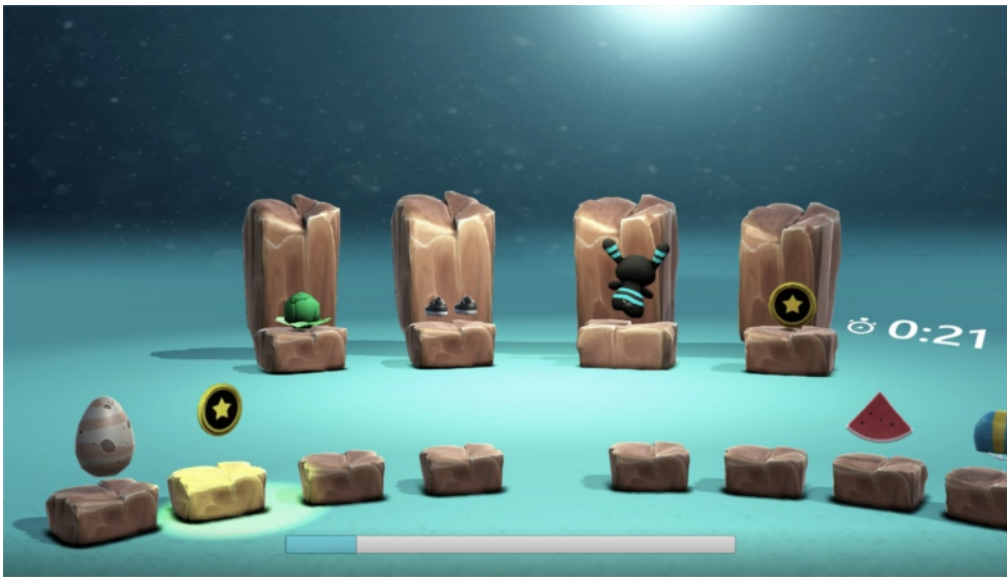






# PROBLEM SOLVING

CLONES

## SAMPLE SETTINGS





◀	Difficulty <b>1/3</b>	▶
Duration 90s		Minitask duration 30s
Range 20% ↔ 80%		Number of pairs 4



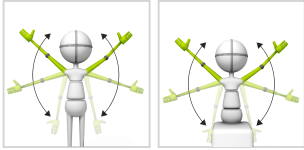


# PROBLEM SOLVING

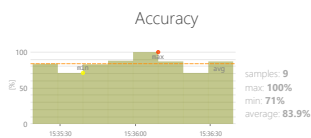
## CLOCK

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



23 %

## ADJUSTMENTS

- Task duration
- Time to complete action
- Angle

## OBJECTIVES

- Speed of decision making
- Visual motor coordination
- Logical tasks

## INSTRUCTION FOR PATIENT

Control the arrows to set the time visible on the left clock.

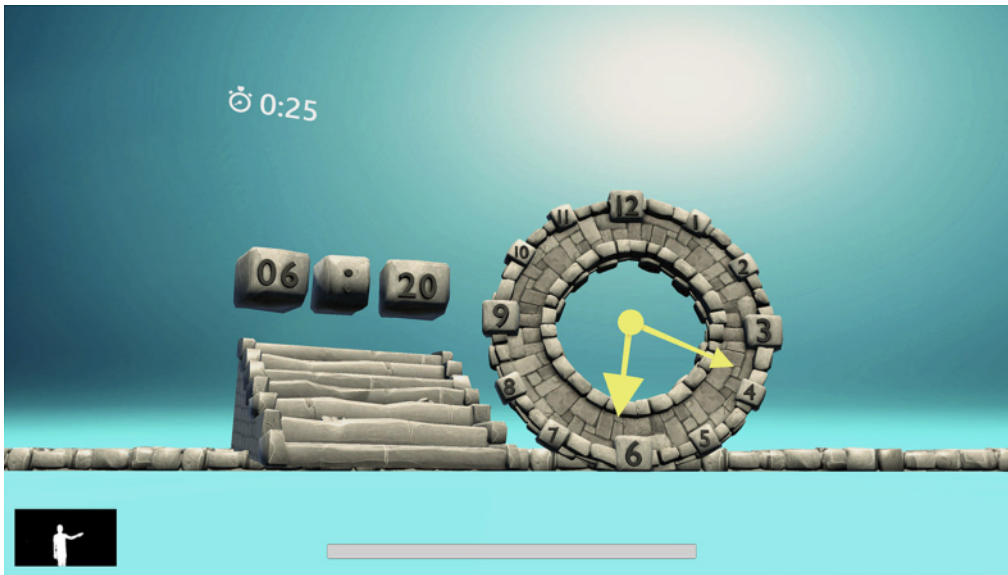




# PROBLEM SOLVING

CLOCK

## SAMPLE SETTINGS



Duration	Minitask duration
< 90s >	< 30s >
Angle 	Angle 
180°	180°



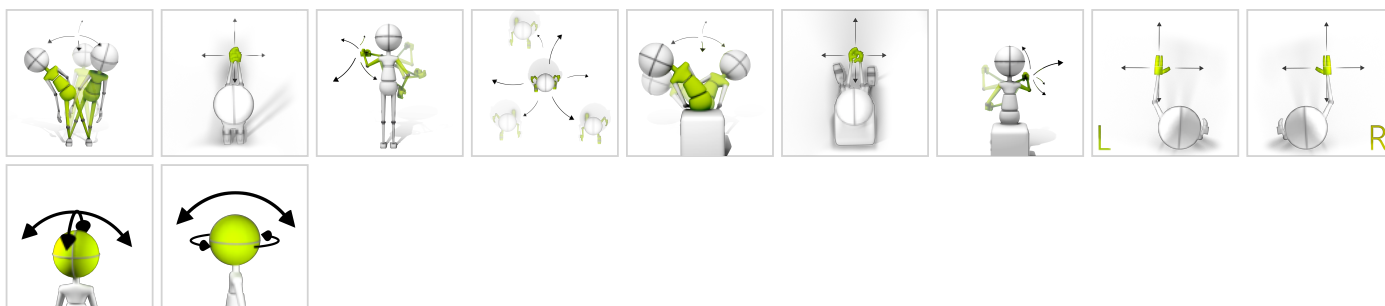


# PROBLEM SOLVING

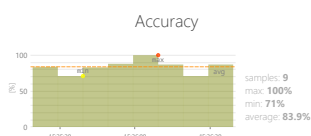
## MAZE

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



25 point(s)



Problem solving



36 %

## ADJUSTMENTS

- Task duration
- Range
- Show path
- Maze size

## OBJECTIVES

- Logical tasks
- Planned movements
- Planning and Strategy

## INSTRUCTION FOR PATIENT

Lead the hippo through the maze to the glowing target.



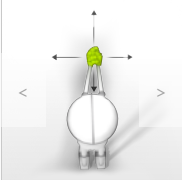



# PROBLEM SOLVING

MAZE

## SAMPLE SETTINGS





◀

Difficulty

▶

1/4

Duration

90s

Range

0% 100%

0% 100%



Show path

No

Maze size

4





◀

Difficulty

▶

4/4

Duration

90s

Range

20% 80%

20% 80%

Show path

No

Maze size

10



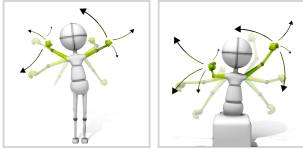


# PROBLEM SOLVING

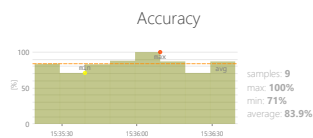
## KITCHEN DISH SORTER

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

29 point(s)



Problem solving

32 %

## ADJUSTMENTS

- Positions to have targets on
- Task duration
- Show hints

## OBJECTIVES

- Both hands grabbing
- Exercise with or without support from healthy limb
- Improve range of motion
- Visual motor coordination
- Movement precision

## INSTRUCTION FOR PATIENT

Put all the dishes in the kitchen cabinets. To open drawers and cabinets, you need to pull their handles. Be careful not to drop the dishes on the floor, or they will break! If you are using touch controllers, pressing the grip button under your middle finger will activate the controller.







# PROBLEM SOLVING

KITCHEN DISH SORTER

## SAMPLE SETTINGS





Active positions

☐ ☒ ☐

☐ ☒ ☐



Duration

< 90s >

Show hints

< Yes >





Active positions

☐ ☒ ☐

☐ ☒ ☐

Duration

< 90s >

Show hints

< Yes >





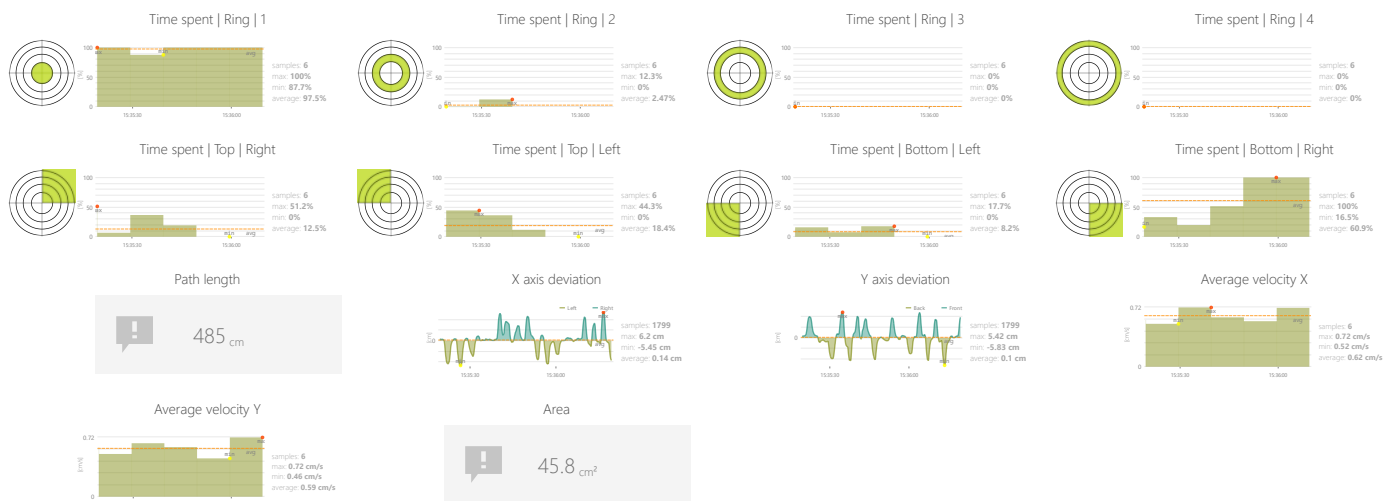
# SPECIALIZED STABILITY TEST

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Time to complete action
- Range
- Show feedback
- Radius

## OBJECTIVES

- Relaxation
- Postural stability

## INSTRUCTION FOR PATIENT

Keep your body balanced.



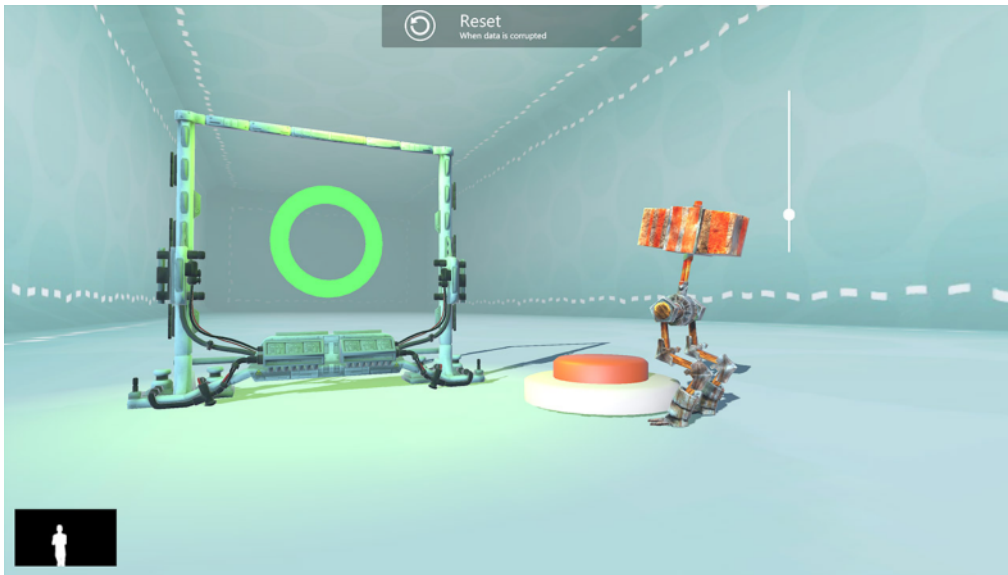




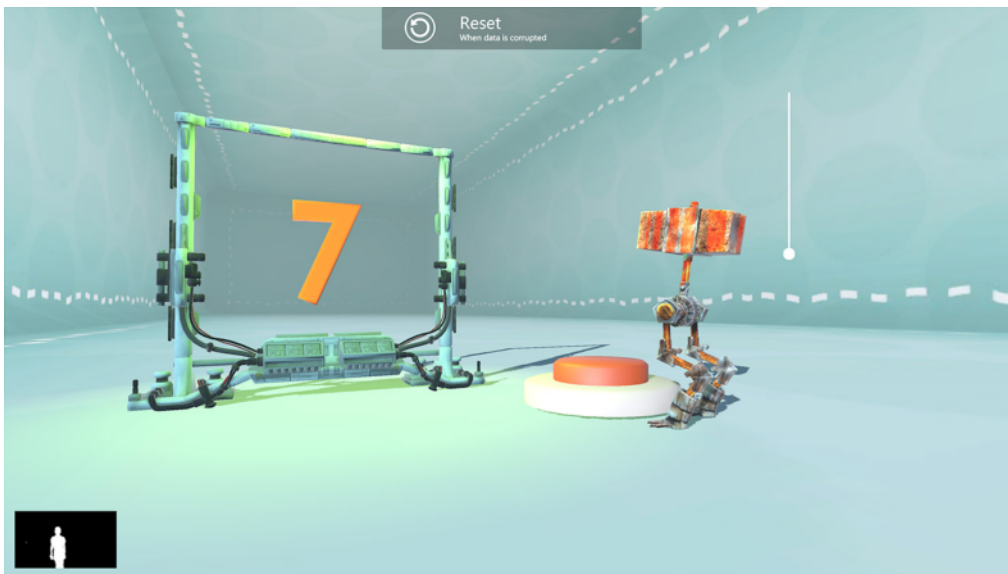


# SPECIALIZED GONOGO TEST

## SAMPLE SETTINGS



Range 0% 100%	Required proper repetitions < 5
	Hit if color is green



Range 0% 100%	Required proper repetitions < 5
	Hit if number is > 5