

# EXTENSION PACK FOR X-COGNI

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:

- Windows 10/11
- Intel Core i5 (8th gen or newer). Important: Avoid ultra-low-power versions (e.g., i5-8250U), as they may not meet performance requirements. Prefer standard or high-performance CPUs.
- Minimum: 8 GB RAM (16 GB or more recommended for optimal performance).

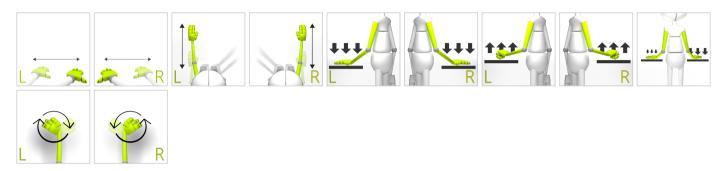




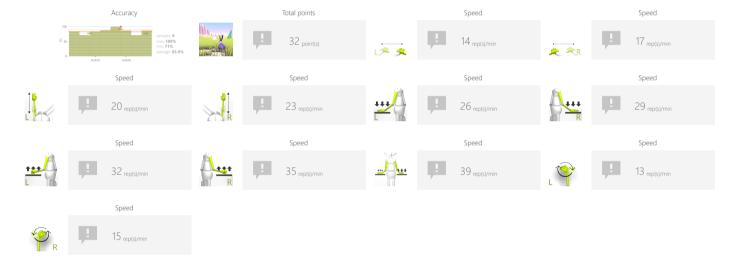
# SPEED RABBIT

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

# **CONTROL MODES**



# **RESULTS**



# **ADJUSTMENTS**

- Accessory
- Task duration
- Range
- Distance from edge

# **OBJECTIVES**

- Speed of movement
- Repetitive movements

# INSTRUCTION FOR PATIENT

Go through the entire route as fast as you can.









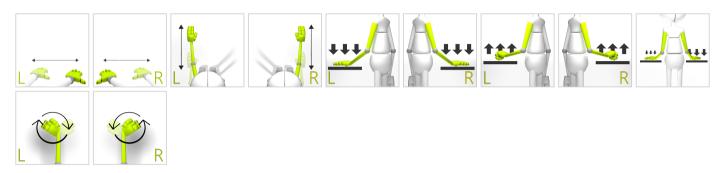




# SPEED KAYAK

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

# **CONTROL MODES**



# **RESULTS**



# **ADJUSTMENTS**

- Accessory
- Task duration
- Range
- Distance from edge

# **OBJECTIVES**

- Speed of movement
- Repetitive movements

# **INSTRUCTION FOR PATIENT**

Row as fast as you can.













# MOVEMENT PRECISION

**FISH** 

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

# **CONTROL MODES**



# **RESULTS**



#### **ADJUSTMENTS**

- Accessory
- Task duration
- Movement mode
- Route shape
- Speed of objects

### **OBJECTIVES**

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

### INSTRUCTION FOR PATIENT

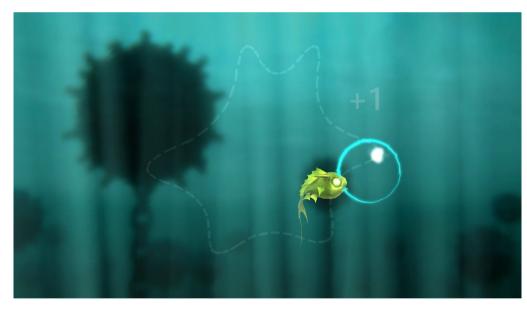
Move the blue circle to protect the sparks source from the fish. When the sparks source is inside the circle it is safe.















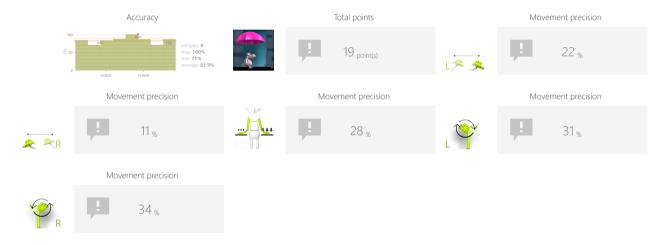
# MOVEMENT PRECISION UMBRELLA

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

# **CONTROL MODES**



# **RESULTS**



### **ADJUSTMENTS**

- Accessory
- Task duration
- Path
- Range
- Distance from edge
- Umbrella size

# **OBJECTIVES**

- Movement precision
- Visual motor coordination

### INSTRUCTION FOR PATIENT

Don't let the hippo get wet - keep the umbrella above him!













#### **HAMMER**

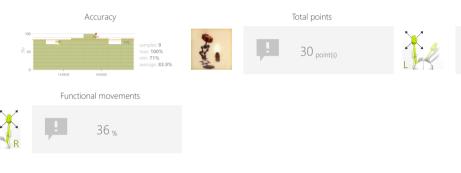
Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

# **CONTROL MODES**





### **RESULTS**



### **ADJUSTMENTS**

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

#### **OBJECTIVES**

- Planning and Strategy
- Sideways walking
- Balance and equilibrium training
- Speed of decision making

#### INSTRUCTION FOR PATIENT

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

Functional movements

32 %











# **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**

- Accessory
- Task duration
- Range
- Number of enemies
- Enemies speed

#### **OBJECTIVES**

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

#### INSTRUCTION FOR PATIENT

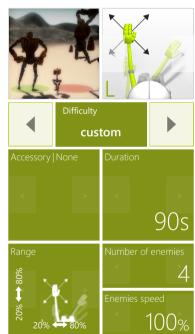
Keep away from the big robots.













### **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**

- Accessory
- Task duration
- Range
- Distance from edge
- 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.













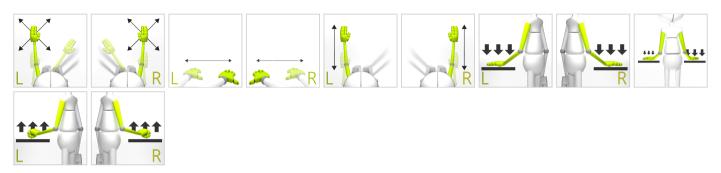




# **ARCANOID**

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**

- Accessory
- Task duration
- Range
- Reticle size
- Speed of objects

#### **OBJECTIVES**

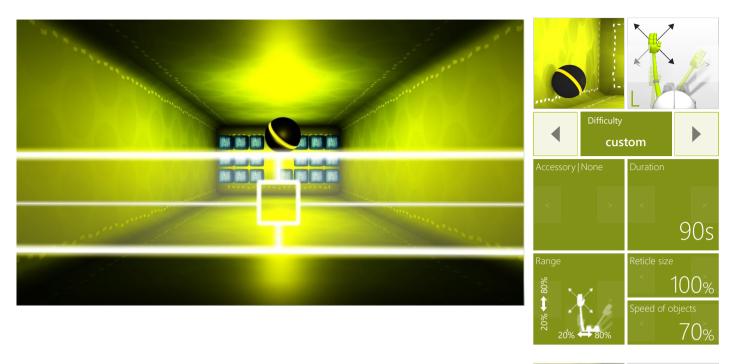
- Dynamics of planned movements
- Predicting the trajectory of objects in 3D space
- Visual motor coordination

### **INSTRUCTION FOR PATIENT**

Destroy as many boxes as you can.















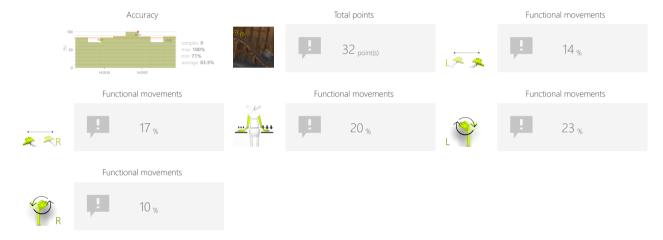
#### **RAILS**

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
- Accessory
- Task duration
- Range
- Route shape
- Distance from edge
- Enable derailing
- Enable obstacles
- Time between objects

#### **OBJECTIVES**

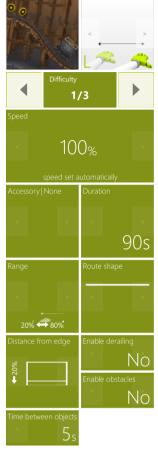
- Dynamic responses to emerging moving targets
- Predicting the trajectory of objects
- Visual motor coordination

### **INSTRUCTION FOR PATIENT**

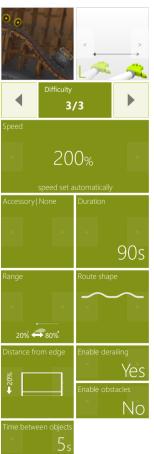
Control the trolley to collect the coins.











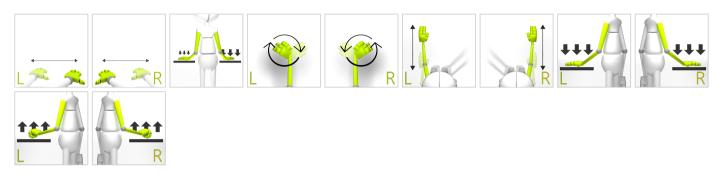




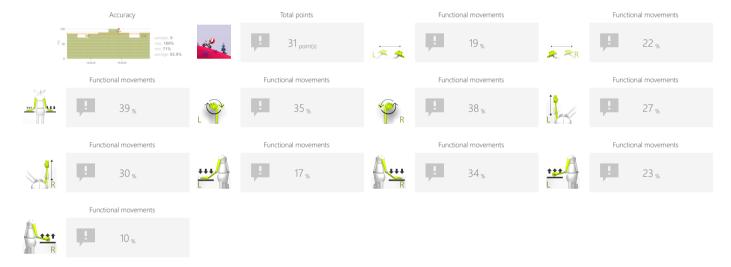
# **MOTOCROSS**

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**

- Accessory
- Task duration
- Range
- Distance from edge
- 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.











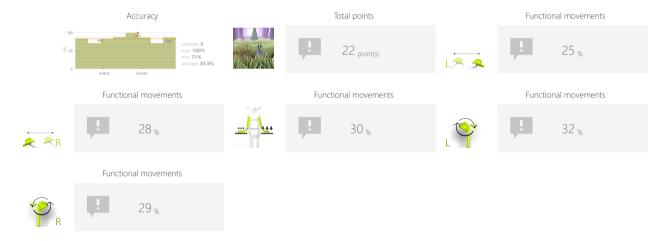
# **FOREST RUNNER**

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
- Accessory
- Task duration
- Range
- Distance from edge

### **OBJECTIVES**

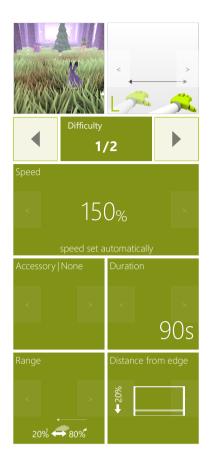
- Dynamics of planned movements
- Focusing
- Planned movements
- Speed of movement

#### INSTRUCTION FOR PATIENT

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











# **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
- Accessory
- Task duration
- Range
- Distance from edge

### **OBJECTIVES**

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

#### INSTRUCTION FOR PATIENT

Control the vehicle to avoid the obstacles.









# STRENGTH STRENGTH TEST

Measure and gently motivate to increase individual's force while performing predefined movement patterns.

# **CONTROL MODES**



# **ADJUSTMENTS**

• Time to complete action

# **OBJECTIVES**

- Strength examination
- Muscle strengthening

### INSTRUCTION FOR PATIENT

Try to achieve best result





# 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**





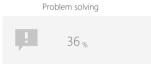
### **RESULTS**











#### **ADJUSTMENTS**

- Accessory
- 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.







