# SAFE-WR

## System for Ameliorating Phobias – Virtual Reality

#### MOTIVATION

13% of the world's population suffers from a certain type of phobia 20% of the people affected by phobias take on therapy or ask for specialized help

- ➤ Cognitive-Behavioral Therapies (CBT)
- ➤ Gradual exposure in-vivo

#### VIRTUAL REALITY advantages:

- Immersion
- Safety
- Greater variety of environments that can be repeated
- Visual and auditory stimuli controlled by the therapist
- Flexibility
- Friendly environment
- Low costs

#### Virtual Reality Exposure Therapy (VRET)

- Strong real-life impact
- Good stability of results in time
- Equal to those obtained in CBT therapies
- No difference in the dropout rate between VR and in-vivo exposure

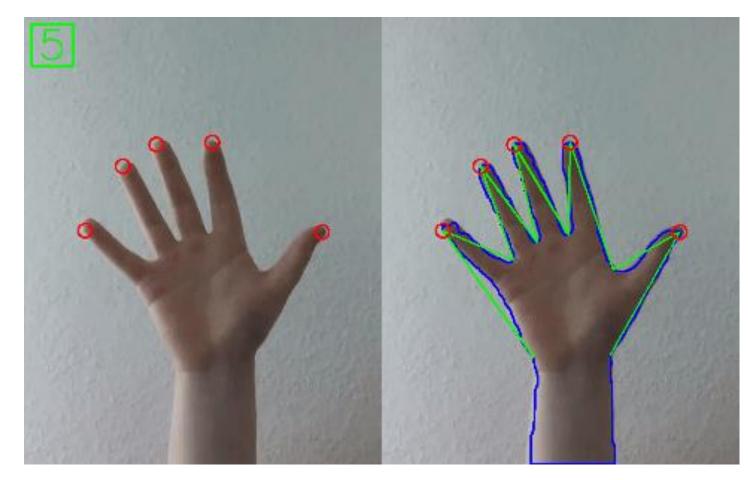
#### **OBJECTIVES**

## Multiple Phobias Treatment

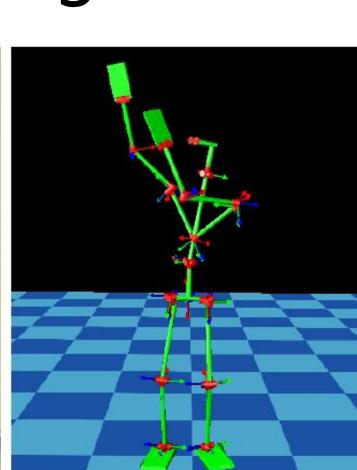




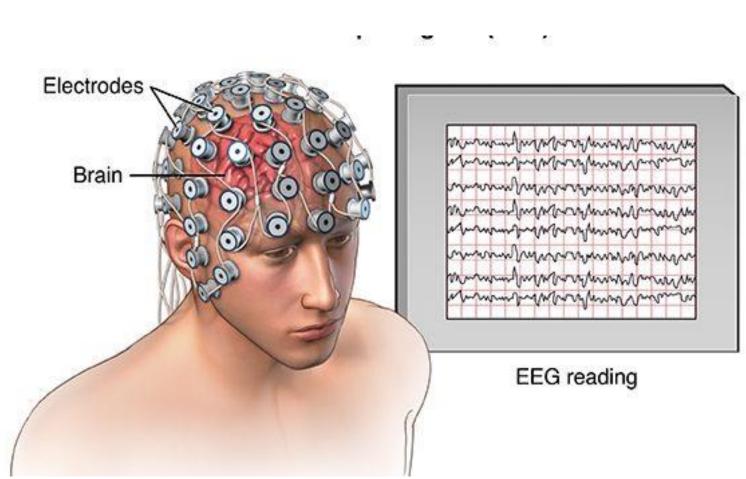
## Gesture recognition & Motion tracking







## Exposure based on biophysical data



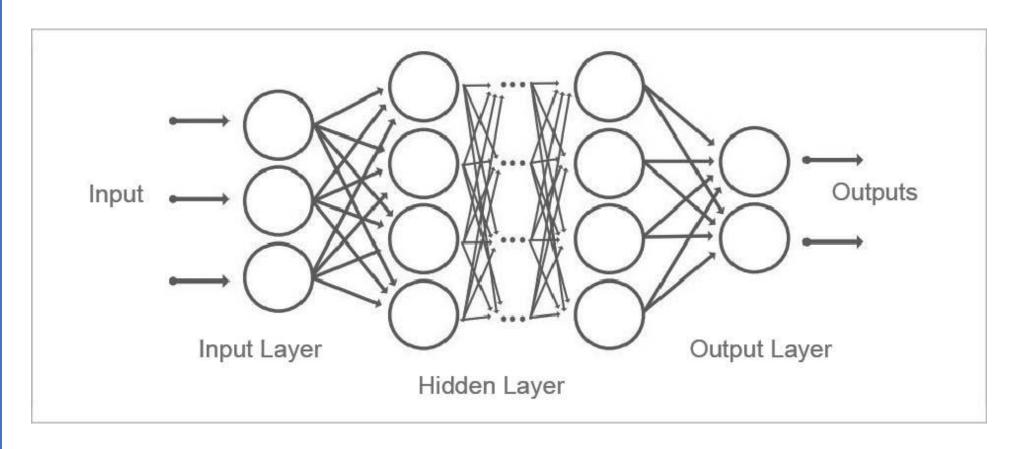


#### Virtual Reality





### Machine Learning & Deep learning



#### <u>IMPLEMENTATION</u>

#### VR Game for treating ACROPHOBIA



