About Project

The Arm Motion Replicator using Electromyography (EMG) is a cutting-edge wearable technology designed to enhance rehabilitation for patients. By capturing muscle activity through EMG sensors and replicating the movements on a glove, this device aids in more effective and efficient recovery.

BU

More Information :

☎

+92 315 5522235

✉

daniyalch58@gmail.com

SCAN ME

Arm Motion Replicator Using Electromyography (EMG)

How It Works

Applications

Benefits

Step 1: EMG Input
EMG sensors capture the electrical activity produced by muscle contractions.

Step 2: Processing
 - Data Acquisition
- Training with Machine Learning and Deep Learning
- Optimized Hand Gesture Recognition Model

Step 3: Glove Movement
The glove replicates the captured movements, aiding in precise rehabilitation exercises

Physical Therapy Centers:
Offering precise, targeted therapy sessions to aid in recovery.

Hospitals:
Supporting rehabilitation efforts post-surgeries, strokes, and other medical procedures.

Home Use:
Allowing patients to continue their rehabilitation journey from the comfort of their own homes under professional guidance.

For Patients

- Improved Recovery Times
- Enhanced Precision
- Increased Motivation
- Reduced Pain and Discomfort

For Therapist

- Better Monitoring
- Customized Therapy
- Time Efficiency

User Testimonial

"Glove design is good, and process is effective and deliver satisfactory performance"