

VR Games for Rehabilitation of Stroke Patients

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- 800,000 people in US have strokes
 - result from clots that stop blood from flowing to part of the brain
- Disabilities and Rehabilitation
 - Speech therapy
 - Physical
 - Hemiparesis - paralysis of half of your body
 - Occupation therapy
 - Daily activities
- How VR Devices Work
 - Rehab req consistant exercises (cerebral plasticity)
- Ex. Become a Dolphin
 - John Krakaur
 - Study app that relies on non task based tasks
 - Similar to hungry shots but played with robotic arm
 - Advantages
 - Stroke patients learning ABCs in new enviornment --> explore new movement and not hindered by thoughts
 - Natural tendency for storke patients to use limbs that were unaffected but now forced to use affected limbs
- How effective
 - Ping pong game
 - After 10 hours of training - patient has more improvement
 - Show improvement in functional skills
 - Types of VR Devices
 - UCLA uses xbox Kinect, mech arm
- Commercialization
 - Tej Tadi -> Mind Maze
 - Develop hardware and software platform that create human Vr

