



Artificial Intelligence Golf Training Simulator

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Experience:

The research field of Wei-Li Hsu is the development of rehabilitation training and assistive devices after surgery of spondylosis, providing evidence of the theoretical basis and clinical efficacy of rehabilitation. **(Department website:**

https://www.mc.ntu.edu.tw/ntupt/Vcard.action?q_type=-1&q_itemCode=114)

Market Needs:

Golf is the largest outdoor paid sport in the United States, and the number of golfers in Taiwan has reached 880,000. However, outdoor sports are easily affected by weather conditions. Therefore, various manufacturers have started to develop indoor golf simulators. Although golf simulators can provide users with feedback by using sensors to provide relevant data during a swing, the main variables that affect the flight of the ball still lie in the human body's movements during the swing. Unfortunately, there is currently no relevant equipment available to detect human body movements in conjunction with golf simulators.

Our Technology:

We developed an inertial sensing golf swing analysis system to analyze the human body's kinematics and kinetics during a golf swing. This system is integrated with existing golf simulators to establish an intelligent cloud computing platform and a database of skilled golf players' swing data. Based on this database, feedback is provided for both beginners to learn proper movements and professional training for experienced golf players.

Strength:

This system integrates human motion capture detection technology and biomechanical parameters such as simulated muscle strength of the human body into commercially available digital intelligent golf simulation systems. It also uses artificial intelligence technology to identify swing motion characteristics based on a database of skilled golf players, providing feedback for beginners to learn proper movements and professional training for experienced golf players.

Competing Products:

4D MOTION

Intellectual Properties:

(1) This invention currently has no other patent applications

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