

The Office of Technology Management

UNIVERSITY OF TEXAS  ARLINGTON

iGait: Low-Cost and Non-Wearable System for Walking Pattern Monitoring

Tech ID: UTA 14-45

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TECHNOLOGY NEED

Monitoring patient's daily-life activities is critical for accurate gait assessment. The live tracking of walking pattern (or "gait") parameters is paramount for the therapy and the rehabilitation process of the patients. It is practically impossible to have a physician on standby to record patient's daily activities all the time. Additionally, making an observation journal to note all activities bring inconvenience to patients and may create discrepancy with crucial information. Existing body-monitoring devices have several limitation; such as it requires patient to wear a several sensors, need of an expert technician to monitor thus increases cost of diagnosis.

INVENTION DESCRIPTION/SOLUTION

UTA researchers have developed an advance gait diagnostics system iGait, which can continuously monitor a patient and give live reports to a healthcare provider. The system does not require the patient to wear any device or sensors since wearable systems are susceptible to false readings and require maintenance. The iGait system has an enhanced accuracy; it is low cost, easy to setup and use as compared to existing gait monitoring devices.

APPLICATION

- Sport training and analysis
- 3-D Motion Capture
- Residential patient's monitoring
- Elderly care service industry
- Clinical diagnostic aid

KEY BENEFITS

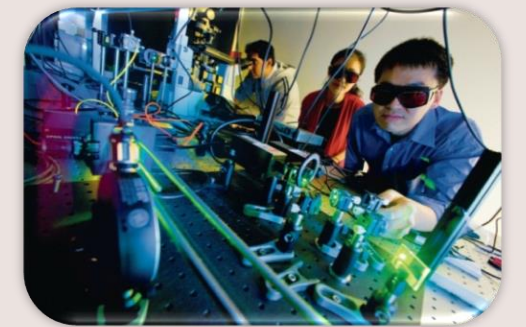
- Inbuilt pattern recognition capability
- Easy to use Android/iPad interface
- Provides actionable information to the physician over a period.
- Saves physician and patient's time and money
- Decreased error in diagnosis.

STAGE OF DEVELOPMENT

Prototyped and tested

INTELLECTUAL PROPERTY STATUS

Patent Pending



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