

## عنوان مقاله:

Comprehensive and Cognitive Approaches in Rehabilitation Design using IMUs for STEM Branch Providing Novel IMU-Based System Design via Machine Learning Algorithms

### محل انتشار:

اولین کنفرانس برق، مهندسی هوافضا، مکانیک و علوم مهندسی (سال: 1400)

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#### خلاصه مقاله:

Applications of IMUs have always been the main focus and concentration through rehabilitation, cognitive, psychological, and therapeutically behavioral related fields as well as physiological aspects and architecturally related issues. In this research study, the recent approaches involving IMU-based embedded devices have been investigated while illustrating the distribution of the main focus of the recent academically published papers over time. Finally, our novel IMU-based system design is introduced while featuring machine learning algorithms and providing a reliable .and validated solution for applications where IMUs can be taken into account

# کلمات کلیدی:

IMU Sensors, Biomedical Applications, Rehabilitation, Sports, Real-Time Monitoring, Cognitive and Behavioral : Therapy

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