



SOUTHWEST RESEARCH INSTITUTE



Markerless Biomechanics Software

Following years of internal research and applied client projects, Southwest Research Institute® (SwRI®) has introduced the Engine for Automatic Biomechanical Evaluation (ENABLE™) markerless biomechanics modeling software for biomechanical analysis in sports, medicine, research, and other human performance applications.

ENABLE combines SwRI's biomechanical modeling expertise with computer vision and deep learning to develop powerful algorithms that enable accurate, reliable markerless motion capture. ENABLE uses standard synchronized video to produce accurate biomechanical results without the need for markers, custom lighting, or custom cameras.

Features

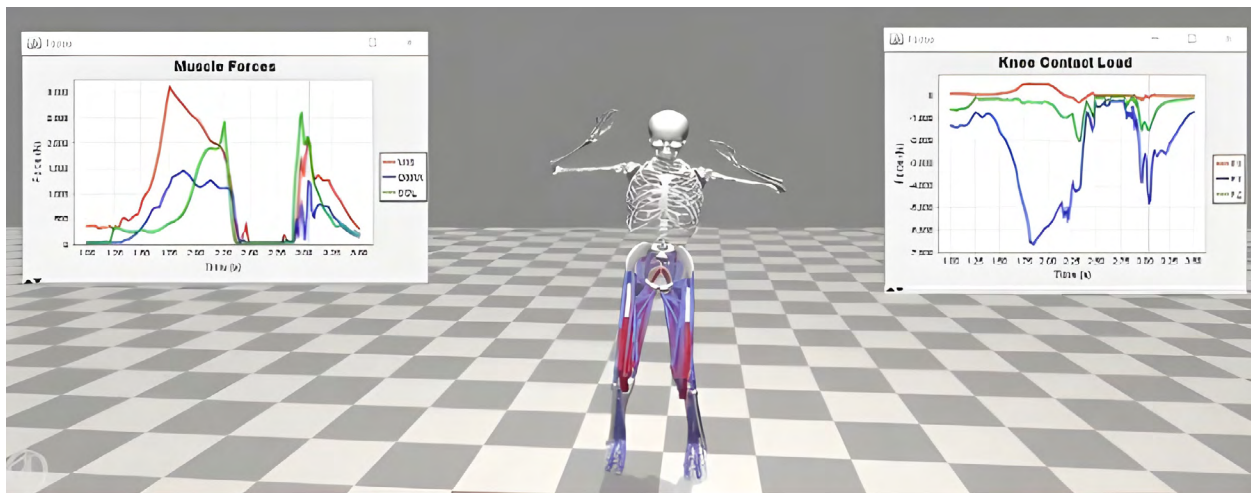
- Eliminates the need for costly, time-consuming marker-based motion capture
- Combines state-of-the-art neural network-based algorithms and advanced machine vision with biomechanical modeling in OpenSim to generate accurate and reliable human movement assessments
- Integrates with many commercial motion capture systems
- General user interface provides camera control, biomechanical analysis, and batch processing capabilities
- Can be customized to enhance performance for particular environments and movements
- Can generate reports specific to client needs



ENABLE accurately measures biomechanics from standard video cameras.



ENABLE can be used in all types of environments and is not restricted to laboratory investigations.



ENABLE provides tight integration with OpenSim for complex musculoskeletal modeling and analysis.

ENABLE is now available for licensing.
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A Product of SwRI

ENABLE.swri.org

SOUTHWEST RESEARCH INSTITUTE

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