

Adaptive Ankle-Foot Prostheses for Improved Stability on Uneven Terrain



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Why this research is important:

Current ankle-foot prostheses do not adapt their alignment on every step of walking. This makes it difficult for prosthesis users to walk on uneven terrain.

Summary:

The VA MADE Program has developed a prosthetic ankle-foot system that can automatically adapt its alignment to uneven terrain on every step of walking. This system works without motors or batteries. The VA MADE Program is collaborating with a United States company to commercialize this technology.

How the research will improve Veterans' lives:

This slope-adaptive prosthesis will improve the balance confidence of Veterans who walk on uneven terrain, leading to increased participation in outdoor activities and improved quality of life.



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