Mobility Enhancement roBotic (MEBot) Wheelchair

VA Pittsburgh Healthcare System

Why this research is important:
Existing power wheelchairs are not intended for heavy duty in outdoor environments, leaving users at risk of tips and falls. MEBot is a novel power wheelchair designed to improve the driving capabilities of Veterans with disabilities in these environments.

Summary:
MEBot consists of six height-adjustable wheels with a modular drive-wheel configuration. These features provide MEBot unique abilities such as seat-leveling to increase the user’s stability and tip prevention when driving over uneven terrains, a curb-climbing application to improve accessibility, and a modular drive-wheel configuration for optimal maneuvering in every environment.

How the research will improve Veterans’ lives:
MEBot will enhance the mobility and safety of Veterans with disabilities when they are maneuvering in outdoor environments. Additionally, MEBot will improve their independency and community participation and thereby increase their quality of life.

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