

Benefits to Members

Access to technology

Access to trained professionals

Wide range of projects on exoskeletons

Teaming and sub-contracting

System evaluation using human subjects

Application demonstrations



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International Consortium on Exoskeletons and Human Augmentation



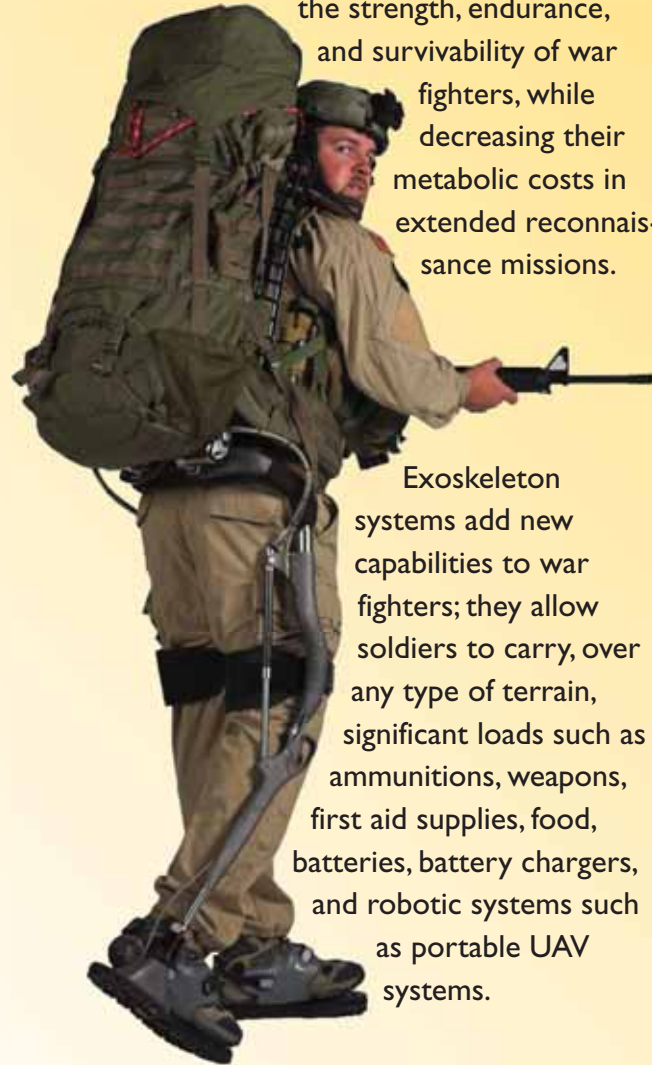
a partnership for the advancement and commercialization of exoskeleton technology

University of California
Berkeley

Defense

An exoskeleton is a mobile platform capable of significant information processing and load carrying capability which allows for enhanced combat capabilities. An exoskeleton increases the strength, endurance, and survivability of war fighters, while decreasing their metabolic costs in extended reconnaissance missions.

Exoskeleton systems add new capabilities to war fighters; they allow soldiers to carry, over any type of terrain, significant loads such as ammunitions, weapons, first aid supplies, food, batteries, battery chargers, and robotic systems such as portable UAV systems.



Medical

Exoskeleton systems allow individuals with limited mobility to be upright and walk. Patients with Spinal Cord Injuries, Cerebral Palsy, Spina Bifida, Guillain-Barre Syndrome, ALS, Multiple Sclerosis, Muscular Dystrophies, and Congestive Heart Failure benefit by the exoskeleton technology.

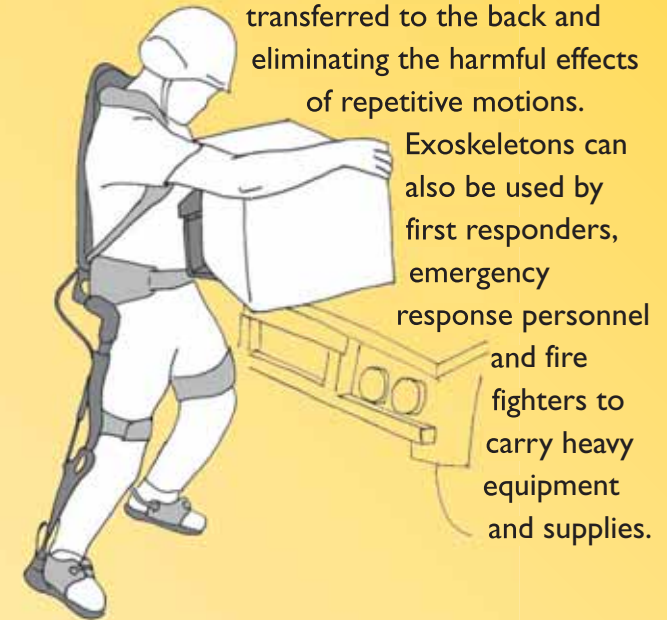
Exoskeletons can also be used for rehabilitation (e.g., post stroke) with little or no assistance from physical therapists. The patient using the exoskeleton will complete more hours of rehabilitation practice during a day at their home or work and therefore the recovery will be faster.

Exoskeletons allow patients to have greater independence and control over their own lives and participate in and contribute more fully to activities of daily living in their communities including their homes, schools, and work environments.



Civilian

Exoskeletons can be worn by workers in distribution centers, warehouses, auto assembly plants, and various factories and manufacturing facilities. One of the greatest advantages of exoskeletons is the ability to remove the heavy load on a worker's torso, thus greatly reducing the injurious forces transferred to the back and eliminating the harmful effects of repetitive motions.



Exoskeletons can also be used by first responders, emergency response personnel and fire fighters to carry heavy equipment and supplies.