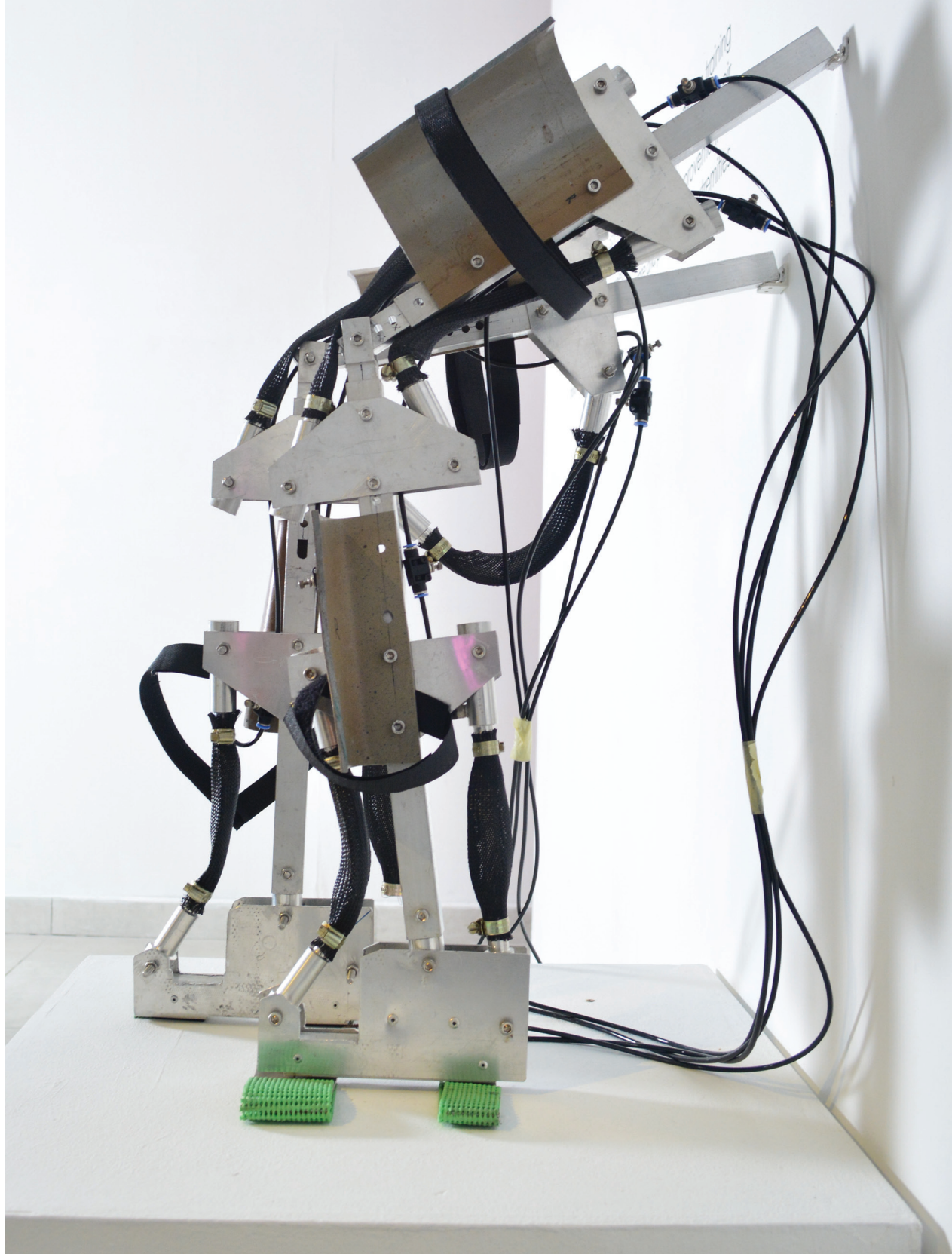


## **Motion Stabiliser**

Asnor Juraiza Ishak

Plasticity is the ability to change and adapt, especially the ability of the central nervous system to acquire alternative pathways for sensory perception or motor skills. It allows the recovery of motor skills after stroke and other neurological diseases. The repetitive locomotion training aims to activate spinal and supraspinal pattern generators in spinal cord injury patients. For stroke patients, many have to focus on improving muscle strength to regain balance and coordination that were obliterated after a blood vessel in the brain bursts or a blockage took place.

Restoration of gait is a major aspect of stroke rehabilitation. Locomotion training has proven to be a highly effective approach to assist patients in recovering their normal walking patterns. Intensive locomotion training plus physiotherapy has resulted in significantly better gait ability and daily living competence in subacute stroke patients compared to physiotherapy alone. The artefact exoskeleton is an example of gait rehabilitation with automation actuated orthosis. The use of exoskeleton has shown significant improvement in locomotion training because it provides a stable, accurate and precise lower extremities motion. From a social perspective, the development of automation actuated orthosis helps reduce the burden to physiotherapists. In gait rehabilitation, no conventional treatment approach has so far proven superior.





ke rehabilitation. Locomotion training  
ach to assist patients in recovering their  
has shown significant improvement on  
accurate and precise lower extremities



