

DIY in-Home AntiGravity Harness

Sponsor Information:

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Project Description:

Children with limited mobility often do not receive the much needed exposure to socialization to appropriately cognitively develop. Existing research shows that enabling young children with self control of their own environment can have meaningful impacts on the long term outcomes given such impairments as cerebral palsy or muscular dystrophy. One place to start and increase mobility is in the home. Imagine you are a toddler, who isn't yet able to walk or crawl on your own, and you want play with a toy on the other side of the room. How the heck is that going to happen if you cannot walk or crawl?

The goal of this project will be to design and fabricate a Do-It-Yourself in-home gravity balancing harness system that parent's of children with movement disabilities can build with limited resources.

Knowledge, Skills, and Expertise Needed:

Prototyping
Fabrication (without the CNC)
Design
Documentation

Equipment Requirements:

TBD by the team according to the customer needs
Prototyping supplies
DIY Tools

Deliverables:

Regular progress reports
Weekly meetings with demonstrations of project status
Documentation sufficient that a parent with most any educational background can purchase and assemble the system you develop