Wheelchair Lift Design
Nominated for Award | CPD

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USU mechanical engineering students with the wheelchair lift they designed

A wheelchair lift, designed by Utah State University mechanical engineering students in partnership with the Utah Assistive Technology Program, has been nominated for a da Vinci Award. The awards are given by the National Multiple Sclerosis Society to help create awareness of the importance of assistive technology and bring more of it to the public. The award winners will be announced on March 10 in Dearborn, MI.

The idea for the wheelchair lift, demonstrated in this YouTube video, came from UATP’s Amy Henningsen, who was having trouble lifting her mother’s manual wheelchair into the car trunk on shopping trips.

Students James Somers, McKay Pace and Brian Laird designed the project for their Senior Design Class under a grant from the National Science Foundation. The device helps people with disabilities and their families easily put manual wheelchairs into car trunks.

Some unique characteristics about the device:

- No modifications to the trunk required.
- Adjustable heights and lengths.
- Clamp for securing the wheelchair.
- Ratcheting handle – prevents slipping of chair when not in motion.
- Safety guard over the winch.
- Additional space left in the trunk for other items.
- Cost effective at approximately $1000.
- A utility patent is pending.