This skiing exoskeleton is designed to take the strain off your legs



Exoskeletons are slowly becoming more common in industrial settings, where they're used to reduce the strain on workers' bodies. But why shouldn't we take advantage of this tech in other physically taxing environments. Like, for example, the ski slope?

Roam Robotics is one startup doing exactly that, and this week unveiled a prototype skiing exoskeleton which the company claims will help experts and amateurs alike. The device looks like a pair of leg braces connected to a backpack, and uses a series of air-filled bladders to mimic the wearers' movements. When users bend their knees, the bladder inflates or deflates automatically, taking some of the strain off their leg muscles.

Roam Robotics says they're basically "intelligent shock absorbers" and thinks the device will have wide appeal. The company claims the exoskeleton will make older skiers feel years younger and able to stay out on the slope for longer. And for athletes, the device will supposedly help them train for days in a row with less fatigue.

So far the company has only built prototypes, but it's in the process of finalizing a commercial product, set for release in January 2019. Interested skiers can pay $99 to reserve a unit, although the final price is expected to be somewhere between $2,000 and $2,5000. *Fast Company*, which tried out a prototype version on an indoor skiing treadmill, said the benefits of the device were pretty clear. "Every time I began a turn, the system actuated, delivering power to my legs, and literally

making me feel like it was lifting me up – which, of course, took the pressure off my quads," writes reporter Daniel Terdiman.

So if you go skiing next year, look out for anybody with robotic legs. They might just be getting an exoskeleton assist.

https://www.theverge.com/2018/3/29/17175540/ski-exoskeleton-shock-absorbers-roam-robotics