

# Tennessee Today

## NEWS AND EVENTS FOR THE



Browse Story Topics

[Alumni](#), [Press Releases](#), [Alumni](#), [College Of Engineering](#), [Department Of Industrial And Systems Engineering](#)

Top Headlines 

# Engineering Alum's Patent Trims Hours Off of Yard Work

AUGUST 19, 2014



79  
SHARES



It has long been said that necessity is the mother of invention.

Thanks to the necessity of a UT **College of Engineering** graduate, people doing yard work the world over could save hours.

Mark Arnurius was frustrated with how long it was taking him to clear refuse from trimmed trees and bushes when inspiration struck.

"We've got tons of trees and shrubs at our place, and they



Alumnus Mark Arnurius invented Tarp Tow to help cut back on the hours of yard work involved in things such as tree limb removal, seen here.

grow about four to five feet in the course of a summer,” said Arnurius, a 2004 alumnus of the [Department of Industrial and Systems Engineering](#).

“It would take me a day and a half just to get one side of the yard done.”

Arnurius said the main problem came in hauling off the material.

After breaking an overloaded wheelbarrow, he took the common route of using a plastic sheet to haul away the yard waste.

“I was in the middle of doing that when it dawned on me that I had just bought a new mower—so why not use it to pull the pile?” said Arnurius, a Knoxville native. “It came completely out of a practical need.

It also came thanks to his UT experience.

Arnurius sketched and tested a device—now called Tarp Tow—to easily hook the sheets onto a mower using techniques he’d learned in college, including 3D modeling.

After getting his design exactly how he wanted it, he began the long process of applying for a patent, an undertaking that tested both his skill and patience.

“People don’t realize it, but just writing up a patent, getting it to where it meets their code before they even begin to review, it takes months,” said Arnurius. “I’m really blessed that I learned how to draw designs at UT, because they get really particular about how you have to do it.”

With his patent now approved and set to be posted on August 26, he has now turned his sights on rolling out his product.

“It’s a really long process, but I kept relying on the confidence I built in myself while studying at Tennessee,” Arnurius said. “I would have never been able to do what I’m doing without UT.”

Arnurius, whose wife, Marsha, is a UT College of Law graduate, has set up a manufacturing floor and researched the best way to sell his invention, deciding to turn it into a web-based business instead of selling through stores so he can better control his costs and expenses.

Anyone wishing to view his product can do so by visiting [Tarp Tow’s website](#).

—

## **C O N T A C T :**

David Goddard (865-974-0683, [david.goddard@utk.edu](mailto:david.goddard@utk.edu))

Be Sociable, Share!





PREVIOUS

NEXT

SEARCH CAMPUS NEWS

## Latest News

[Pride of the Southland Band Kicks off 2014 Season with New Music, Surprises](#)

 6 days ago

[Anton's Tips for College Success](#)

 1 week ago

[Big Orange: Campus Welcomes Its Largest Freshman Class in at Least Three Decades](#)

 2 weeks ago