LumOS Helps Purdue University Continue Its Legacy of Computational Innovation

The year is 1962.

John Glenn becomes the first American astronaut to orbit Earth.

The Seattle World's Fair unveils the cordless telephone.

Goldfish Crackers debut in grocery stores for the first time.

And at Purdue University, the catalyst of a revolution begins. The very first Computer Science department in the United States is founded, igniting a spark that will fuel decades of innovation in computing, artificial intelligence, biology, climate research, and more.

Purdue's rich scientific history is illuminated in bright relief on the aptly named Fortress, an 11-Frame Spectra Logic TFinity tape library housed in **Purdue University's Rosen Center for Advanced Computing**, located in West Lafayette, Indiana.

At a Glance:

- Purdue University sought a faster operating system for the TFinity tape library, named Fortress.
- Tasks that used to take 15 to 20 seconds are now instantaneous with LumOS.
- LumOS supports the storied legacy of Purdue's time-honored goal of computational innovation.

> With LumOS, **I can monitor my tape library in a realistic time scale**, enabling me to do more without having to take a trip to my data center.

Ramon Williamson
Senior Research Solutions Engineer, Rosen Center for Advanced Computing
Purdue University

Since 2006, Ramon Williamson, senior research solutions engineer at Purdue University, has stewarded the immense storage needs of Purdue's research and computing efforts by overseeing the Spectra TFinity. The active archiving capabilities of the Fortress can support an eye-opening 212.2 petabytes of data using LTO-9.

> **LumOS is almost instantaneous. It's saving me hours on tasks.**
>
> – Ramon Williamson, Purdue University

When Spectra launched the LumOS software in 2024, Williamson didn't hesitate. He jumped at the opportunity to improve the performance of his tape library infrastructure.

"I upgraded to LumOS because I wanted a faster solution. While my old system took 15 to 20 seconds to initialize a task, LumOS is almost instantaneous," says Williamson.

Those seconds add up.

What once took days — manually adding, removing, and managing tape drives — now takes half the time.

His freed-up bandwidth allows Williamson to redirect his energy toward more impactful, technical work.

Speed. Efficiency. The ability to remotely orchestrate complex operations, such as ejecting dozens of tape cartridges (which, before LumOS, required in-person involvement).

These upgrades directly elevate Williamson's daily workflow to archive mission-critical data for a Tier 1 research university dedicated to improving lives, strengthening national defense, providing a dependable food supply, and more.

LumOS Helps Continue Purdue's Lofty Research Initiatives

Consequently, Purdue continues to attract record-breaking investment to fund this science:

In 2024, the institution received more than $647 million in research funding for the 2023-2024 fiscal year.

Behind the scenes, Williamson plays a pivotal role in upholding Purdue's proud tradition of bleeding-edge innovation in computational infrastructure.

LumOS is a valuable tool that helps him elevate this mission to new heights.

"With LumOS, I can monitor my tape library in a realistic time scale, enabling me to do more without having to take a trip to my data center," he says.

"LumOS is doing the work for me."

An early computer at Purdue University, April 26, 1963.

Schedule a Demo of LumOS