

## Sharing knowledge to empower space missions

Why the team designing space supercomputers documents their knowledge in Nuclino.



## N/S/ About NASA and SHREC

SHREC (Center for Space, High-performance, and Resilient Computing) is a one of a kind research organization dedicated to assisting NASA in mission-critical computing. The organization has a proven track record of developing computing solutions and advanced algorithms to handle the challenging radiation and thermal environment of space. The SHREC team has created some of the most innovative, powerful, dependable, and adaptable types of space computers in the world, which have been used in a growing list of recent and upcoming space missions.

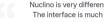
> 48 2018 300+

## The challenges of knowledge retention

SHREC consists of 4 universities, and over 30 industry and government partners working collaboratively to solve research challenges.

"A persistent issue the center faces is student graduation and turnover," said Christopher Wilson, a technology researcher at NASA Goddard Space Flight Center and former res assistant at SHREC. "Organizations such as SHREC must find tools and techniques to maintain a stable knowledge foundation, as well as prepare and train new students entering the

SHREC previously relied on a commonly used wiki hosting service Wikispaces for information persistence within the center. However, in 2018 Wikispaces announced they were discontinuing educational website support. Leaders at SHREC discussed several possible replacements in a trade study and finally settled on Nuclino as the key information hosting service moving forward.



Nuclino is very different from traditional wiki hosting services. The interface is much more modern, intuitive, and real-time.



## Making documentation effortless with Nuclino

A considerable challenge for both researchers and graduate students is documenting the results of their work

"If a student needs to spend a significant amount of time documenting, while still under pressing deadlines, most students will avoid proper documentation and the knowledge may be lost when they graduate," continued Christopher.

Nuclino has been successful at SHREC "because it is so incredibly easy to learn and use, no wikitext or markup language is required," according to Christopher. This allows students to quickly access, add, and modify pages on-the-fly.

"It is also convenient that Nuclino provides markup shortcuts and allows direct copy and paste of pictures and diagrams, without the need of an upload editor tool," he added "Instead of a time overhead for learning traditional wiki formats, students save time and energy with the fast, easy WYSIWYG editor provided by Nuclino."

