

New technology helps the visually impaired reach for the stars

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Credit: University of Queensland

An app developed by a University of Queensland student is helping the visually impaired navigate the stars and planets in our solar system.

UQ Information Technology and Electrical Engineering student Yuma Decaux fell in love with space at the age of seven, but after losing his own sight in 2009 he could no longer look up and take in the skies.

"Today, there are myriad tools, software and apps that provide a clear view of the sky and its stars and planets," he said.

"They're probably really cool, but they haven't been designed with accessibility for the blind.

"So I took to the task of creating an app that covers this – for me and all other [blind users](#) who have the same interest and curiosity for what shines above our heads 24 hours a day."

Yuma and his team won the Brisbane leg of the NASA Space App Challenge with the app concept.

"I designed it so the user can obtain what is called an 'ephemeris' or astronomical information about an object in the solar system," he said.

"I did this by using NASA's data as well as providing multiple earth data maps representing various dynamic and non-dynamic graphs of satellite surveys.

"We are now ramping up for the national challenge, and hopefully the international one too."

Apple's education division will also use the app in an upcoming Education and accessibility summit in Dubai, early next month.

Yuma said he lost his sight suddenly, and had to adapt to his new circumstances, from finding his way with a cane to brushing his teeth.

Yuma is the co-founder of [Oseyeris](#), a [startup company](#) working to merge leading edge robotics with elegant design to create technology for the visually impaired.

Provided by University of Queensland

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