

## Universe2go boosts amateur astronomy

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?Astronomy compels the soul to look upwards and leads us from this world to another.? ??Plato

?It's been said that astronomy is a humbling and, I might add, a character-building experience.? ??Carl Sagan

You



can't argue with Plato or Sagan.

Our species had long held a fascination in those pinholes in the fabric of the night sky.

In a relatively short amount of time, our race has gone from complete mysticism about the universe to actually understanding a great deal about our planetary origins.

And most of this came about from simple observation ? by looking up.

It's only been 474 years since Copernicus proposed the sun was the centre of our solar system, an idea later proven by Galileo with the first telescope. Galileo is considered the father of astronomy.

So, what have we learned in those hundreds of years??Well, pretty much everything.

While we had to take a number of baby steps along way, we developed space flight in the last century. It has only been 48 years since humans have stepped foot on the moon. Our knowledge of the final frontier has grown exponentially in the past five decades. Scientists and even backyard amateur astronomers are making historic discoveries on a daily basis. The Hubble Space Telescope continues to send us ground-breaking images. It's hard to believe it was sent up 27 years ago.

Hubble has recorded some of the most detailed visible light images ever, allowing a deep view into space and time. Many Hubble observations have led to breakthroughs in astrophysics, such as accurately determining the rate of expansion of the universe.

Few of us astronomy buffs have anything of this scale in our backyard. But technology is improving, and has brought us many gizmos and gadgets to help young and old alike explore the stars.

One neat product is Universe2go.

It's an interactive star viewer, which combines a view of the real night sky with the digital world. As a two-piece augmented reality system, the Universe2go brings together a black star viewer with your own smartphone and the accompanying app. Through an integrated mirror in the star viewer, a digital picture of constellations is transmitted to the user's eyes. Simultaneously, the user can see the night sky through the transparent front of the viewer.

Sensors in the phone and GPS technology superimpose this digital picture over the real starry sky. Constellations, planets, deep-sky objects and even satellites can be seen and identified. The addition of the audio guide gives you facts about the object in view. The user navigates the menu with head movements, allowing you to change modes without taking the smartphone out of the viewer.

With Universe2go, you can experience the stars as if you were in a planetarium. Even dimmer stars, which generally remain unseen as a result of large cities and their light pollution, are now visible thanks to the star viewer.

Six different modes make the star viewer an interesting and fun device for beginners and experts alike. While the viewer depicts and

explains the many constellations in ?Beginner? mode, ?Discovery? mode provides in-depth information, such as distance and brightness of each star. ?Mythology? mode features the Greek legends and myths connected with stars, while ?Deep-Sky? mode depicts star clusters, nebulae and alien galaxies, and ?3D? mode gives the user a feeling of floating through space. Experts can choose and apply individual settings as to which information is featured on specific objects. Finally, for anyone who enjoys a challenge can test their knowledge within the new quiz mode.

The most current smartphone models with Android or iOS operating systems are compatible with Universe2go.

My 16-year-old son Liam hopes to get into a space-related field. This is an amazing learning tool and I highly recommend it to anyone who has an interest in astronomy. For more, visit <http://universe2go.com>

I've had a love of space since my childhood, being a product of Star Trek reruns on our black and white TV. I was six when Neil Armstrong stepped foot on the lunar surface. That day our future changed forever.

Not everyone shares my interest in ?what's out there,? but people these days tend to have more than a passing interest in outer space. More university courses, and career paths, are tied to the private space industry and engineering gizmos for exploration.

No matter who you are, you can't help but marvel at images from Hubble ? those beautiful, mysterious things that abound in our universe. Humbling??You bet.

Those whose feet are firmly planted on terra firma believe we need to concentrate on Earth-based issues and problems, before we head into space.

I agree. But space represents the last major hurdle or unexplained mystery faced by humankind. Exploring space reveals our greatest qualities ? curiosity, a sense of adventure and simply looking around the next corner.

Bob Marley once said to understand where we're headed, we need to know where we came from.

He may not have been referring to our cosmic origins, but his sentiment is bang-on.

Our past is out there. Our future is out there, too.

We need to understand both to propel us, head-first into what's yet to come.