**A Peek into the Futuristic World of Space Technology**

Do you ever wonder what space technology will look like decades from now? When you look up into the night sky, do you ever wonder what it would be like to walk on Mars or even explore the bottom of the ocean? Thanks to space technology, many future possibilities are becoming reality today. With this in mind, here’s a peek into the future of space technology and how it will impact your life in ways you never imagined possible.

**The Need for Space Tech**

Why is space technology so important? As commercial companies like SpaceX, Blue Origin, and Virgin Galactic are making their way to outer space with technologies that had been previously deemed impossible, we’re witnessing a future where many industries will begin to integrate elements of space tech into everyday life.

**How Far We’ve Come**

When humans first ventured into space, it was just for a quick trip around Earth. Since then, there’s been a steady push to discover new planets, new solar systems and other celestial bodies. Some of our recent advances include NASA’s Curiosity rover that recently found organic compounds on Mars and SpaceX’s reusable rocket system. Companies like Rocket Lab are also trying to make space travel more accessible by launching rockets from outer space rather than using traditional runways—all while reusing their rockets. And scientists have created water ice-producing trees that might one day be able to harvest water in extreme environments like Mars or Saturn's moon Titan.

**What We Can Do With It**

It seems like every few months, space technology advancements push humanity forward. It was recently discovered that it’s possible to create diamonds in space—and even from old beer cans. Similarly, graphene is a strong, yet lightweight material that can be used to build things like solar panels and spacecrafts. Graphene has amazing properties—it’s a highly conductive material, yet more than 100 times stronger than steel by weight.

**Future of Space Tech**

As commercial spaceflight enters its first sustained period of rapid growth, some companies are looking for more efficient ways to ferry astronauts and payloads from Earth to space. As it turns out, your car might hold part of the answer. Engineers at Blue Origin have developed a technology that can be adapted to rocket engines, which they say could improve performance while cutting costs. And it comes down to tires — those things we see in abundance on earth but can't find much use for once our cars stop running. The solution is a novel hybrid rocket engine that uses both solid- and liquid-propellant components, with a tire as an integral part of its operation. How do you power a rocket with an old rubber? First, let's look at how traditional rockets work. They consist of three main parts: A fuel tank containing propellants (usually a combination of liquids), an oxidizer tank filled with oxygen or another chemical capable of supporting combustion, and a combustion chamber where these two chemicals mix together before being ignited by an ignition source. The burning propellants produce hot gases that flow through a nozzle to generate thrust, pushing the vehicle forward or upward. In addition to producing thrust, these hot gases also create pressure within the combustion chamber and exhaust pipe (the chimney), allowing engineers to control how quickly their rocket will accelerate by throttling back or shutting off propellant flow altogether.