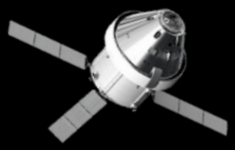
CODING IN THE WILD by CodeHS

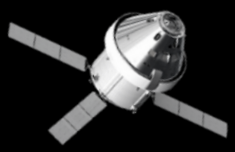


Coding for Spacecraft Design

Dr. Columbia Mishra is a Senior Staff Systems Architecture Engineer at Maxar Technologies Inc., a space technology company. **With her education and coding skills, she designs spacecrafts!**

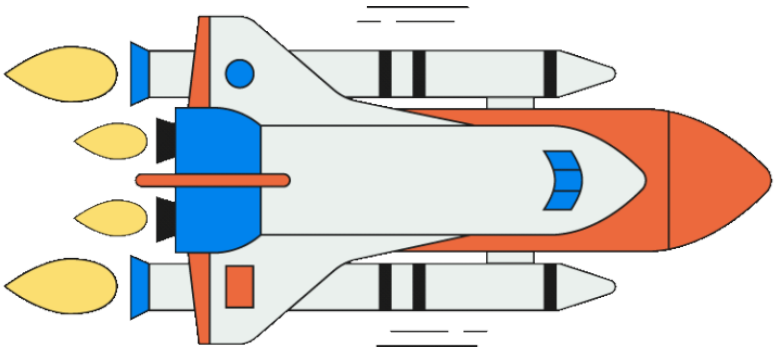
Dr. Mishra wanted to work in the space industry and be an astronaut since middle school. She started using coding in college to better understand the movement of slower moving liquids while studying engineering in India. Then she came to the United States where she worked for a company that helped oil and gas companies solve challenges with floating platforms and drilling. She wrote programs to analyze data and come up with solutions for them. Dr. Mishra went back to college again to earn a masters and later a doctorate degree, where she used the **programming languages C++ and Python** to research things like the movement of heat through different substances.

The spacecraft Dr. Mishra is currently working on will **land the first woman and the next man on the Moon** for NASA's Artemis Mission. NASA stands for the National Aeronautics and Space Administration. This is a government agency focused on space research.



Coding for Spacecraft Design

The goal is to have humans living in space in the future, and Dr. Mishra's work will help us get there. She **uses code to write programs** that calculate how heat moves through objects in space. The tools her company makes will help keep astronauts and spacecrafts at a safe temperature as they travel in and out of space!



Engineering is the combination of math and science to design all sorts of complex things, from rocket ships to buildings. **Coding and engineering skills are the key to success** in Dr. Mishra's work.
To solve hard problems, it is important to understand the basics first. For example, identifying a problem and the limits to solving that problem.

Having access to the right tools and coding skills can help you get a lot done in a shorter amount of time, helping to accomplish more goals quickly and **have a meaningful impact on the world!**