
My NASA Data - STEM Career Connections

So, You Think You Can be a Data Scientist



Desiray Wilson, Data Scientist

What Does a Data Scientist Do?

Imagine being a detective for the digital age—that is essentially what a **data scientist** does! They use data as a powerful tool to explore and explain the world around us. Because data is everywhere, this field is incredibly versatile; you could use data science to study complex social systems and human behavior, or even look toward the stars to explore the mysteries of astrobiology. Whether you are curious about how societies function or how life might exist on other planets, data science provides the skills to investigate phenomena and find answers in almost any area you can imagine.

During this activity, you'll be introduced to Desiray Wilson, a data scientist who is interested in Earth science and in making Earth science data more accessible to all. However, before we meet Desiray, let's start by exploring your personal data science abilities.

Your Skills

Consider the following prompts and take notes about your responses:

- Think about your last 10 scores of your favorite game. (It could be a videogame, a card game, a board game, a sport, etc.).
 - Your highest score was _____.
 - Your lowest score was _____.
- Which range would you say most of your scores fall into?
 - High
 - Medium
 - Low
- Do you have any score that is much higher or lower than the rest?
 - Yes
 - No
- Now, think about the music you enjoy listening to. When are your favorite times to listen to music?

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- Mornings
 - Afternoons
 - Evenings
 - Do you have a favorite hobby, such as playing a musical instrument, a sport, or any other activity? In the past year, what has been your progress at that activity?
 - You are better at it than last year
 - You are the same at it compared to last year
 - You are worse at it than last year
 - Think about photos you have taken that you really like. Have you ever zoomed in any of those photos? If so, how did zooming in help you?
 - To see details more clearly
 - To focus on a specific part
 - Because the whole picture was too big

If you were able to answer any of the questions, you may already be practicing some useful data science skills!

All of these skills will be helpful to you if you decide to become a data scientist! If you have not practiced any of those skills, it is never too late to start. Let's meet a data scientist, and we will see how your skills match up with her skills.

Meet Desiray Wilson



At about 12 years old, at a school band recital. Credit: Desiray Wilson

Desiray Wilson is a data scientist at NASA Langley Research Center, in Hampton, VA. She develops visualizations of Earth science data that help educators, students, and the general public to better understand what happens in our world!

Desiray grew up in the small town of Hill City in the state of South Dakota. When she was in school, she really enjoyed art, science, and music. She painted, played the flute, and loved doing lab

experiments. Sometimes math and chemistry classes were challenging for Desiray. However, she knows that those challenges helped her learn that it's okay if some things take extra time and practice to master. Desiray really enjoys learning new things and exploring the world around her. In college, she studied geology and programming so that she could learn more about the Earth. In her free time she still enjoys doing art, spending time in nature, and traveling.

Recently, Desiray earned a very prestigious award. She received the NASA Exceptional Public Achievement Medal for outstanding public achievement advancing open science, innovation, and next-generation engagement through her work!



NASA Exceptional Public Achievement Medal. Credit: Desiray Wilson

Desiray's Skills

Watch the following short video and pay close attention to how Desiray makes sense of temperature data.

[Video: Discovering Data with NASA Scientists: Desiray Wilson](#)

Discovering Data with NASA Scientists: Desiray Wilson | <https://www.youtube.com/watch?v=gyKiLfC-Pgl> | Source: My NASA Data

Your Shared Skills

Now you know more about how Desiray makes sense of Earth science data for her work. So, it is time to complete the following table with examples of activities that you and Desiray do. Feel free to rewatch the video to help you complete the table. You may also add any other skills you identify, as well as examples of activities you would like to do to practice a new skill!

Shared Skill	Example of How You Practice this Skill	Example of How Desiray Practices this Skill
Determining the maximum value in a dataset.		
Noticing a pattern, in other words, things that happen again and again.		
Focusing on a small part of a picture or graph.		
Grouping data into ranges, like low, medium, high.		
Observing a trend, like if something is getting faster or colder over time.		
(Add your own.)		

Just for Fun

What is your favorite ice cream flavor? Desiray's favorite ice cream flavor is mint chocolate chip! Whether or not you and Desiray have the same ice cream preferences, you and Desiray sure share many important skills!

Reflection

Many of your current activities are already preparing for a very bright future. If you are (or become!) curious about data and how to make sense of large datasets, you are practicing many skills that will help you succeed as a Data Scientist. Feel free to use the diagram below to envision your Data Scientist career. You can draw yourself as a data scientist in the center of the diagram!

I will collaborate with...

My work will help...

My data will include...

I will focus on topics such as...

I will work at...

I will use tools like...

Some skills I will use...

Answer Key

Teachers who are interested in receiving the answer key, please complete the [Teacher Key Request and Verification Form](#). We verify that requestors are teachers prior to sending access to the answer keys as we've had many students try to pass as teachers to gain access.

