# **My NASA Data - STEM Career Connections**

**MATHEMATICS: Data Scientist** 



#### **Education**

Mathematicians and statisticians typically need at least a master's degree in mathematics or statistics. However, some positions are available to those with a bachelor's degree.

## **Work Description**

Data scientists work with data captured by scientific instruments or generated by a simulator, as well as data that is processed by software and stored in computer systems. They work with scientists to analyze databases and files using data management techniques and statistics. From changes in sea level, atmospheric composition, or land use, data scientists help make sense of the petabytes of data that NASA collects and stores.

May work in the following areas:

Data Systems - Hardware Systems - Data Analysis Theoretical Simulation Techniques - Computer Research and Development - Software Systems - Modelling - Flight Data Systems - Ground Data Systems - Flight Software Systems - Ground Software Systems - Flight Hardware Systems - Ground Hardware Systems - Data Systems Analysis

## Why is this job Important?

Data is generated and stored constantly by NASA satellites. However, what do we do with all of the data? How can we maximize their potential to make informed decisions? Data Science (DS) helps users make sense of the petabytes of data being stored by using statistics and deep learning to make

better decisions. DS helps users to predict possible situations and risks so that we can work on avoiding them.

#### **NASA Connections**

## **Job Title NASA Examples:**

- Data Scientist
- Systems Development
- Data Mining and Knowledge Discovery

## NASA Career Links:

- NASA Careers
- NASA Internships & Fellowships Pathways
- NASA Student Volunteer Program

### **NASA Professional Profile**



Check out this interview with a NASA data scientist, Chris Mattmann.