

# BIOINFORMATICIAN

## Degree required

Bachelor's with relevant experience,  
Master's or PhD in bioinformatics

## Average starting salary

\$78,000



## THE JOB

### Key job characteristics

In this role you get to work with a team of people who are all very knowledgeable about multiple technologies. You also need to be a creative problem-solver, as there are usually several ways to solve a problem.

### Most rewarding part of the job

Being part of a team of really smart people. Also, being a bioinformatician allows you to be in a space where you can still write code to generate and analyze data rather than marketing a bioinformatics product and interacting with people.

### Most challenging part of the job

Wanting to continuously improve the efficiency of code versus other priorities and projects. Sometimes the scale/size of the data to analyze can be challenging.

## MISCONCEPTIONS

### About bioinformaticians

That we are able to look at sequences of A, T, C and Gs and translate that into a trait.

## THE SKILLS

### Important soft skills

The ability to communicate and present clear, rational ideas to a group of people, the capacity to socialize with people outside your team to find out what problems they are working on (it may help your own work), and, like every job, you need to be adaptable to be successful.

### Important lab or hard skills

You will be expected to learn new languages, like shell scripting and Python, and new technologies constantly throughout your career. You can't be mentally lazy and settle on a quick and easy way to solve a problem. The problems we are working on are significant, and that makes the solution incredibly important.

## SOME TIPS

### Advice for high school students

Learn how to code. And put your phones away at the dinner table—human relationships matter even more.

### Helpful courses to take in high school or college

Biology, genetics, and computer science classes like math and programming. It's important to learn Python.

# A DAY IN THE LIFE: BIOINFORMATICIAN

A typical day for a bioinformatics scientist can vary greatly depending on the organizational group they belong to. Here's what a typical day looks like for a bioinformatics scientist working in a services or consulting (customer-facing) group.



Meet with field teams from around the globe to discuss new opportunities to help customers with their analysis needs



Do research on the best approach for problems outlined in meetings



Join sales and other teams to meet with a customer who has potential bioinformatics needs, understand their objectives, and propose solutions and timelines



Collaborate with colleagues from various departments to find out what's happening in their groups and understand what projects they are working on



Import template code, script analysis, and review the outputs, maybe even input additional, more diverse customer data to ensure the analysis software we are writing/using is robust enough to handle data that has a slightly different profile from what we initially created



Put together a presentation about the solutions you've built in the last 6 months and how they helped the customer be more successful

## Reflection questions

- What is something new you learned about this career?
- How does this job work with the other careers in genomics you have learned about?
- How can you use this career insight to help you explore your own passion?
- If you could talk to someone with this job, what would you ask them?
- Is there anyone in your personal network you could connect with to learn more?

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