

5 steps on

How to become a freelance data scientist



Pau Labarta Bajo

Do what you love. Anywhere. Anytime.

Are you a data scientist who has been working from 9 to 5+ for as long as you can remember?

Do you feel there might be a better way to make the best of your time and knowledge?

Are you ready for a new adventure?

If the answers to these questions is yes, this ebook is for you.

Why freelancing?

The transition from your current 9-to-5 job to remote freelancing is a liberating experience.

The ultimate payoff is immense, including:

- higher learning speed, as you are constantly taking in new projects and working with different technologies.
- opportunity to work with cutting-edge startups, without having to leave in a small room in San Francisco.
- freedom to organize your days, weeks, and months, plus no one is counting how many vacation days you have taken off this year.
- higher hourly rates, which translate into higher paychecks at the end of the month

Why freelancing?

Becoming a freelancer is also challenging, though, and full of mental hurdles and shadowed by impostor syndrome.

This is why most people still work (and live) in the 9-5 world.

The most common questions are:

- How can I find clients?
- How can I showcase and prove I can help them, and get the project?
- How should I price my services? How much should I charge?
- What about interviews, how should I prepare for them?

Do not panic. I had all these fears too.

And I managed to overcome them with the 5-step approach I will share with you.

Let's get to it!

Step 1

Start small

There are lots of freelance data science jobs online. A quick search on a site like Upwork will show you hundreds/thousands of clients looking for some kind of data science expertise.

- *I need someone to scrape a website*
- *Looking for experts in Power BI*
- *Open position for ML engineer, with focus on CV*
- *Experts in TensorFlow for NLP project*

Data science is a vast field, with very diverse profiles and skills. This is something every data scientist should be thankful for, by the way.

It is likely you have a decent knowledge in several of these areas, and you might be tempted to apply for every single project where you think you will deliver results.

Step 1. [Start small](#)

This is what I initially tried, and the results were pretty disappointing.

I was able to get interviews with clients, but none of them landed me the project. I spent countless hours writing application letters and proposals but did not manage to convince a single client.

What was the problem?

Looking back I see it very clearly: I was not playing on my strengths. Instead, I was applying to every single project where I thought I could do the job, and presenting myself as the all-in-one data scientist.

The problem is that most clients do not look for an all-in-one data scientist, but someone who can help them solve their specific problems.

Eventually, I sat down and defined what were the things inside data science I was **already an expert in.**

And it was a no-brainer.

Step 1. [Start small](#)

In my previous job, I had spent countless hours building dashboards in Tableau, to help the marketing team monitor and optimize campaigns.

This was not the kind of work I was dreaming of when I started my freelance path, but it was something I was an expert in.

Two weeks later after this epiphany, I landed my first freelance contract.

My first freelance job could be crudely described as

“None of our data engineers can build a pretty dashboard in Tableau. Can you?”

This was not the most exciting job I could think of, but something I had done thousand times in my previous job. I was an expert in that, and this is what has value for the client.

I had 0 doubts I could get the job done.

Step 1. [Start small](#)

My advice is the following:

Before you start looking for jobs, you need to define the thing(s) you are already an expert in, for example:

- Building dashboards with Tableau.
- Training ML models for Computer Vision.
- Scrapping websites
- Or deploying a data pipeline in Google Cloud.
- ... among others

Data science is a huge market. By narrowing your profile you are still fishing in a pretty large pond. Keep that in mind.

Start your path by focusing on projects you feel super positive about. Avoid impostor syndrome, earn your first check, and build up confidence.

Working part-time, or even hourly, you can earn the same as in your previous 9-to-5. Use this as an opportunity to learn new skills in your extra time, in preparation for the next area you want to work in with your next contract.

Step 1. **Start small**

Nowadays, most of my freelance work revolves around building and deploying ML models. This is something I wanted to do from the beginning, but I got there step by step.

Start small and expand.

Step 2

Minimum Viable Portfolio

When I started looking for freelance jobs I did not have a public portfolio of projects to prove my expertise to clients.

And sadly for me, this is the one thing that clients were most interested in.

"I see in your LinkedIn profile you worked on time/series. Can you show me what you built?"

Clients want to see real work and projects you have completed in the past. They want to see solid proof you can deliver.

Unless you have public projects available on the Internet like open-source contributions, public apps, or dashboards on Tableau Public, you will need to bootstrap something.

Step 2. [Minimum Viable Portfolio](#)

When my first client was interviewing me, he asked:

“Can you show me a dashboard you built with Tableau in your previous job?”

At that moment, I realized I had saved on my laptop a few screenshots of the dashboards I had built in my previous job. I was pretty lucky there.

I guided him through the logic and design choices I made to build it. And I convinced him I was the guy for the job. This is how I landed my first job.

If you are planning to start a freelance career, you should start **collecting and saving assets** you can showcase to future clients.

They will come in very handy as you start having interviews.

Step 2. Minimum Viable Portfolio

You can store these privately, in Google Drive, or put them on the internet for everyone to see.

Obviously, you need to remove any confidential data or information linked to the project, to avoid legal issues.

If you wanna showcase ML code you have developed in the past, I recommend you

1. Create a public repository on GitHub
2. Push the code, and
3. Write a well-structured README (this is very important!)

The purpose of this README file is to explain to your client (usually a non-technical guy) how your ML work helps solve a business problem.

Start your readme focusing on **WHAT** you are trying to solve, then you jump on to the **HOW** you solve it.

Step 2. [Minimum Viable Portfolio](#)

You can go one step further and publish your ML work as a

- [Google Colab notebook](#) or
- an app in [HuggingFace Spaces](#).

Your client will be able to use the product right away, without any git pull or local setups.

Using a product is much more convincing than just hearing about it.

If you are a data visualization expert you can publish your dashboards to public repositories, like

- [Power BI Data Stories Gallery](#)
- [Tableau Public](#)

Again, letting your client see and interact with the final product is the most powerful way to convince her.

Step 2. [Minimum Viable Portfolio](#)

Landing your first job is the hardest. Then things get easier.

Build a small public/private portfolio that focuses on your strengths. Every new project you land is another entry in your portfolio. Keep valuable assets and re-package them to showcase to future clients.

Making them publicly accessible will make your life easier, especially at the beginning of your freelance path.

Step 3

Fish in several ponds

Nowadays there are lots of freelance platforms you can use to find clients and projects.

I have used 3 of them (Upwork, Toptal, and Braintrust), but feel free to explore others as well.

These platforms can be classified into 2 groups:

- volume-based platforms
- quality-based platforms

Volume-based platforms

The largest platform of this kind is [Upwork](#).

There are no entry barriers both for clients and freelancers. Anyone can publish a job, and anyone can register as a freelancer.

It is a good place to find small projects, but quite hard to get good clients when you start.

Step 3. [Fish in several ponds](#)

Good jobs are usually open only to applicants who have built a reputation inside the platform through previous projects. This puts you at a disadvantage, and can frankly get quite frustrating when you start.

Nonetheless, I suggest you create a profile in Upwork. Upwork clients can find your profile through a search inside the platform, and directly ask you to send a proposal. This is an option you have to leave open.

Quality-based platforms

The best platform is [Toptal](#), followed by [Braintrust](#).

They have fewer clients but with much higher quality. In order to see and apply for projects inside these platforms, you need to pass a screening process.

It takes around 2 to 5 weeks to complete. It is time and energy-consuming, but the payoff is immense.

Step 3. [Fish in several ponds](#)

Being inside these platforms gives you the opportunity to connect with great clients, usually startups and big enterprises, who are willing to pay higher rates for the quality that these platforms promise them.

My recommendation is the following:

- You open a profile on [Upwork](#) and open the door to direct client requests, as well as the opportunity to apply every week to 10 jobs you are already an expert in.
- At the same time, you apply to join [Toptal](#) and prepare for their screening process. If you wanna know more details on their application process, I recommend you read [this article](#).
- If you get a rejection from Toptal, I suggest you apply for [Braintrust](#). They are the fastest-growing freelance platform, and they are rapidly adding high-quality clients to the platform, mostly American startups and big enterprises.

Step 4

Writing proposals

Imagine you followed the previous steps. So, you have

- defined your niche,
- built a minimal portfolio you can showcase, and
- found an interesting project you would like to work on

The next step is to write a proposal to land an interview with the client.

You want to convince her you are worth having an interview with, and hopefully, start working together.

The question is:

How do you write project proposals that open the door to an interview?

Step 4. Writing proposals

A common mistake is to start a proposal like this:

Dear X.

My name is Y, and I am a data scientist with N years of experience in A, B, C and D.

I have a background in E, and ...

Sure. Your potential client would like to know about your incredible background. But she is not your mom or dad.

She wants to get the problem solved, so go straight to the point. Focus on the problem from the first paragraph, without preambles and presentations that can only make her yawn.

Use bullet points to enumerate very specific things that are directly related to the problem and to decrease the cognitive load.

Also, keep BS to the minimum. Do you enjoy reading how someone else praises herself? Same for your potential client.

Step 4. Writing proposals

In my experience, the proposals that earned me a job had a similar structure, where I first focused on the client's problem, and then I connected it with relevant projects I have worked on and can showcase later in the interview.

I close the proposal with a subtle call to action, inviting her for a follow-up.

Example.

Hi X,

My name is Y. I believe your problem can be solved by using an ML model I have a lot of experience with. It overcomes the actual issues, adds value to what you do, and finally earns you more trust, clients, and money.

I have built N things recently that are directly related to your problem Z:

- ***Project alpha***
- ***Project beta***
- ***Project gamma ...***

I would love to help you with this one. Let's set a call this week to get into the specifics.

Best, Y

I recommend you save every project proposal you send, no matter the outcome. This way you keep track of what works and what doesn't and helps you improve over time.

Step 5

Pricing

When you open a profile in any of these freelance platforms you set your hourly rate: how many USD you want to be paid per one hour of work.

You might be tempted to think:

“Let’s try to increase my chances of landing my first job by setting a lower rate than what I think makes sense given my skills AND cost of living.”

Big mistake. And, by the way, I made that mistake, twice. In my second freelance project, I was working with another data engineer, in the same time zone, whose salary more than doubled mine. He was working freelance for the first time.

Countless times I regretted my smart pricing.

Step 5. Pricing

Most clients are willing to pay higher rates to decrease project uncertainty. Yours is a highly qualified job, and **excessive price discounts are interpreted by the client as higher uncertainty** on the project's success.

Also, keep in mind you are trying to convince another human, not a cost-minimizing android.

You need to show confidence, and setting a lower price than what you think you are worth is the opposite of that.

A couple of tricks to find the hourly rate that works for you:

- If you have previously worked on a 9-5 basis, you can take your old monthly gross salary and divide it by the number of hours you worked per month. Your freelance hourly rate **cannot go lower than that.**

Step 5. Pricing

- Based on what I have seen in the market, hourly rates for data science should not go lower than \$40 USD per hour and can get up to \$100-\$150 per hour. The exact number depends on your seniority and also on your geo location.

Feel free to experiment on this, but never go below 40 USD/hour.

Conclusion

Freelance remote work as a data scientist is incredibly rewarding, both intellectually and financially. It can be bumpy at the beginning, but once you overcome the initial challenges, it will be difficult for you to imagine that you have worked any other way.

With the right attitude and persistence, I know you can get there.

It would give me immense pleasure if any of this advice helped you in your freelance path.

If there is any way I can help you on your path, feel free to contact me at plabartabajo@gmail.com.

If you want to read more about freelance, data science, and machine learning, subscribe to [my newsletter](#) or [check out my blog](#).

Have a great day!