

# EXPLORE || DATA SCIENCE ACADEMY

GET HIRED  
A game plan





# INTRODUCTION

This summarised guide is designed to be used in conjunction with the **THRIVE** content you have access to on **Athena**. In this guide, we will share some of the lessons that we have learned and skills that we have developed throughout our careers.

It must be reiterated that, ultimately, your job search is your responsibility, and like many things, what you put in is what you get out. Having said that, we are here to support you.

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# CV AND COVER LETTER

## CV

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Have you ever heard the expression: “*You never get a second chance to make a first impression?*” In the job market, that is exactly what a CV is – it is the hiring manager’s first impression of you. To use another analogy, CVs are the key to the door, and to open the door, you need the right key.

CV, which stands for curriculum vitae, means ‘*course of my life*’ in Latin. Your aim is to relay a condensed course of your life in one to two pages. That may seem short, but the length of your CV is exceptionally important – recruiters spend on average about 7.4 seconds looking at a CV! Interestingly, it takes about 100 milliseconds for someone to form judgements about your character and whether they like you when you first meet them.

You have access to [EXPLORE AI’s CV Template](#) and are strongly encouraged to use it. Should you choose not to, the following tips are still applicable to CVs in general.

General CV guidance:

- **Be accurate and truthful.** Being hired under false pretences will only land you in trouble!
- **Write it yourself.** Nobody knows you better.
- **Keep it to one page.** Or two pages at an absolute maximum.
- **Check and double-check** spelling, grammar, punctuation, and contact details.
- **Have three to five peers review** your CV for formatting and presentability.
- Make sure it’s always up to date.
- Tailor the **objective** to the job you’re applying for as far as possible.
- Don’t use jargon or acronyms.

- Your CV must look good printed in black and white.
- **Less is more.** No long paragraphs or sentences. Highlight key points. Use lists.
- **No photo** is required for a CV.
- No need to include references. They will be requested if necessary.

Let's break down the sections of the CV template:

## Header

### Name:

If you are known by a name other than your full name (a westernised name or adopted nickname), include this too.

#### Do include:

- Phone number (optional)
- Email address – make sure it's professional (e.g. not sexy.gal@gmail.com)
- Current city, country
- LinkedIn URL
- Personal website (if applicable)

#### Don't include:

- ID number
- Marital status
- Age
- Race
- Gender
- Sexual orientation





## Work experience

- Include **all** relevant experience.
- The intention is to show you:
  - take responsibility;
  - achieve things; and
  - are nice to work with.
- Use a maximum of three bullets for what you were responsible for, what you achieved, and what skills you acquired.
- Use numbers where possible for achievements, for example, “improved X by Y%.”
- Don’t add process information, for example, “attended meetings” or “managed information and process flow by collaborating with six individuals”.
- Include experience demonstrating what you’re good at, for example, sports, religious organisations, volunteering, mentoring, community work, etc.
- Show what you learned/achieved during each work/activity.



## Education

- Most recent first.
- No earlier than high school.
- If space allows, include outstanding achievements/awards, for example, prefect, academic awards, prizes, cum laude, etc.
- For postgraduate studies, include one line on your research topic/major subjects.

## Objective and summary

- Use an **objective** if you are changing careers, you are a student or entry-level applicant, or if you choose to take the time to write something custom and compelling.
- Don't include generic statements like "I am a hard worker with a passion for results and achieving great things".
- Keep it focused. Use a two to three-sentence block to demonstrate your interest and candidacy for the position you hope to land.
- Use a **summary** if you are applying within the same industry and/or if you have many years of work experience.
- Keep it brief with two to three sentences that provide a synopsis of your work experience and skills.

## Skills

- Include six to eight skills, but keep it fewer than 10.
- Hard skills include tools, software, etc. required like CRM or Python. It is critical that you only list skills that you have a fair amount of mastery of.
- Soft skills are abstract and difficult to measure, for example, communication and empathy.
- Include **keywords** – ideally matching those found in the job spec.
- If space allows, include extracurricular interests/hobbies:
  - list maximum two items; and
  - include only unique activities, for example, languages spoken,
  - and not generic activities, for example, reading, travelling, etc.

## Cover letter

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A cover letter is also generally made up of sections. It should start with your personal details and the job you're applying for. You should address it to the person who will read the cover letter. If you don't know who this is, you can address it to the company's hiring manager, for example, "Dear EXPLORE AI hiring manager". This is a more **personalised approach** than simply, "To whom it may concern".

From here, the cover letter usually begins by **expressing your interest** in the particular position. Then, the two key sections to include are what interests you about the role and company – which you should keep relatively brief – and why you believe you're a strong candidate for the position, the team, and the organisation. In closing, you might express your hopes for the outcome of the application.

### [EXPLORE AI Cover Letter Template](#)

A cover letter should be short, ideally not more than half a page and in the range of **200 to 400 words**.

You may have realised that cover letters need to be **tailored** to each of your applications. An obviously generic cover letter will be dismissed as quickly as it is picked up. Indeed, it is important that you carefully consider how to align what you've learned about the role and company with your own history and attributes. Doing this for your CV is a great idea too. You can adjust your written profile and the ordering of your skills and achievements to best match the requirements of the position you're applying to.

Finally, a quick note on consistency. Since your CV and cover letter are sent together, it's important to make sure that they are **visually and linguistically consistent**. Asking some of your peers to review your documents will help to identify inconsistencies and areas to improve. If you've used a template for your CV, ensure your cover letter uses the same fonts, font sizes, and colours. If you've written a bio in your CV, ensure its tone matches that of your cover letter, and so on. These kinds of consistencies help form a cohesive personal brand, a concept that will be discussed in more detail later on in *Career Services*.

# EXPLORE AI'S APPLICANT TRACKING SYSTEM (ATS)

An ATS is a software that effectively acts as a database that we use to collate your professional information to share with potential employers. We use a program called **ZOHO Recruit** for this purpose.

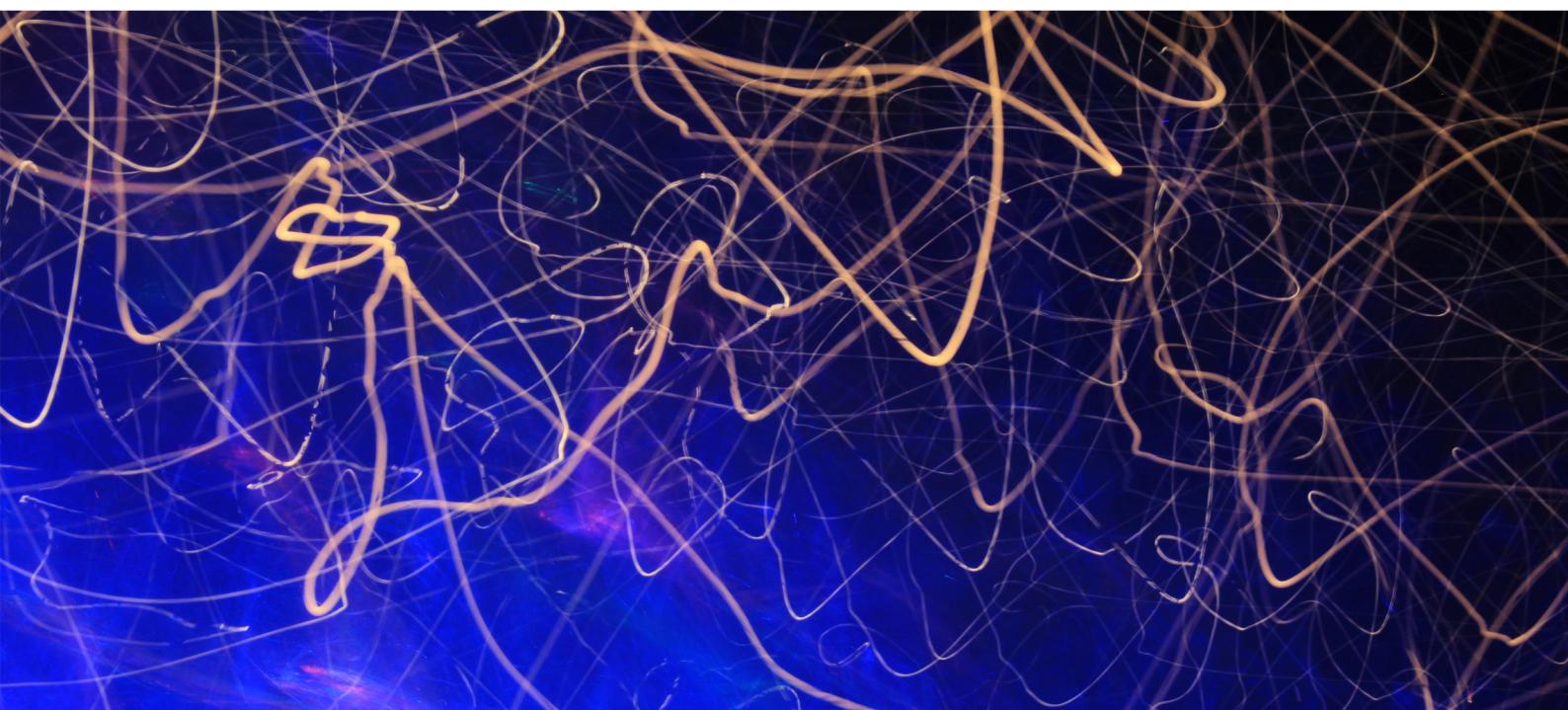
As mentioned earlier, finding a job is your responsibility, but we do work with several employers and often have requests to see profiles of potential candidates.

By now, you will have received an invite to activate and complete your profile on our **candidate portal**.

Be sure to fill out all of your details accurately and upload your awesome CV. You can refer to [these slides](#) if you want some guidance while completing your profile.



**To reiterate, it is super important that you have a complete profile on our candidate portal!**



# PERSONAL BRANDING

## What is a personal brand?

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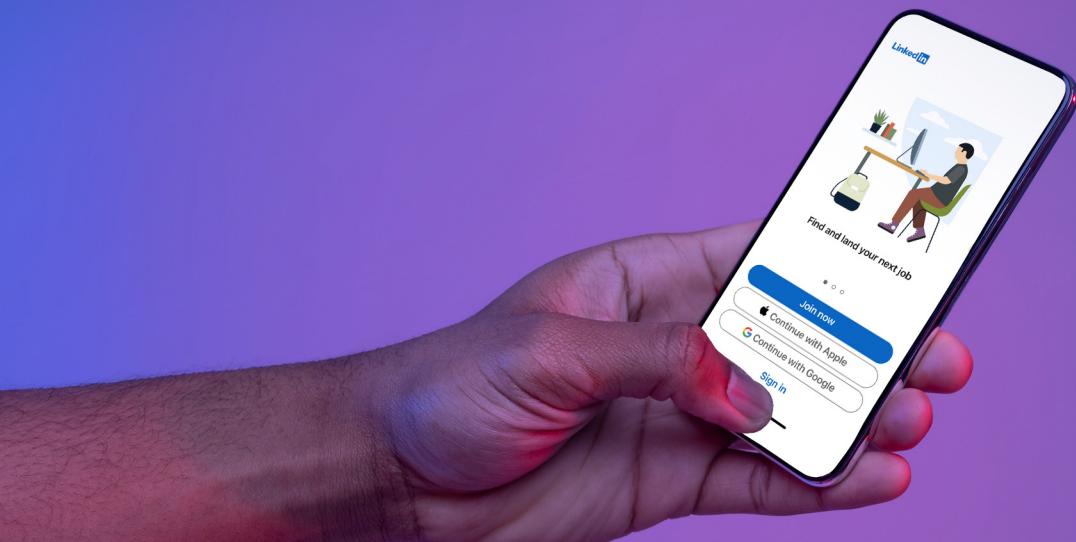
Jeff Bezos, the founder of Amazon, is famously quoted as saying, *"Your brand is what people say about you when you're not in the room."* In the past, branding used to be reserved for products or services, but with the advent of social media over the last few decades, every person now has a brand (whether you know it or not). Think of it this way: if you were to **Google** yourself, what would pop up? I would imagine that your **LinkedIn** or **Facebook** profile... that is your brand (or a part of it, at least).

## Why is a personal brand important?

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Job search aside, imagine you were about to go on a date with someone you met on a dating app. You can be 100% sure that they will have done their research (as I am sure you would). What would you want that person to learn about you? You want your online reputation to be an accurate representation of who you are.

Back to your job search... more than **70% of employers use social media as a method of screening candidates** at some point in their hiring process. This number goes even higher when you look at remote hirers.



## LinkedIn profile

We include this section dedicated to LinkedIn as it is the most widely used professional social network – it has more than 800 million users worldwide. As previously mentioned, more than 70% of employers will use social media as a way to screen candidates... and LinkedIn is their go-to!

LinkedIn is where you can build, maintain, and tailor your **digital reputation**. It's about showing YOUR expertise, YOUR insight, YOUR world, and YOUR personality, as well as supporting YOUR network. One of the most common misconceptions of LinkedIn is that it is only used for your job search – there is so much more to it than that!

Benefits of using LinkedIn:

- **Strengthen** your digital reputation.
- **Build** a network of like-minded individuals and build relationships with relevant industry connections.
- **Command** authority in your industry.
- **Support** your network.



Only 3% of LinkedIn users post weekly, which means if you are a regular poster, you can automatically stand out! What's more, LinkedIn content generates 9 billion impressions weekly, so a lot of people are looking at what you share!

### How to optimise your profile

This slide deck will guide you through some of the basics of optimising your profile.

# YOUR PORTFOLIO

Employers want to see what you can do. Simply telling them is not enough. A portfolio is proof of your work and your ability to use the tools you've listed in your CV.

## Some dos and don'ts

### Do:

- try to create a project from start to finish, using your full stack of skills;
- choose something that you are passionate about and that speaks to you – it will also be a lot more enjoyable this way;
- choose something that shows the value in your skillset;
- a project that shows your skills are transferable to a business context; and
- remember to make report-style notebooks like you did for your predicts.

### Don't:

- use a generic dataset like Kaggle's Housing or Titanic Data (yawn);
- make it too complicated – show that you are capable but not cocky;
- forget about data privacy; and
- ignore things like data cleaning and exploration – this is something employers want to know you can do.



## Where do I find the data?

Here are some links where you can find some data that is open to the public. You can also create your own dataset!

- <https://data.humdata.org/>
- <https://lionbridge.ai/datasets/the-50-best-free-datasets-for-machine-learning/>
- <https://archive.ics.uci.edu/ml/datasets.php>
- <https://www.kaggle.com/datasets>



**Remember to let the data guide you. Choose a dataset before you create constraints that you can't work with.**

## What should my portfolio look like?

In short, your portfolio should be a reflection of you and your work, so it can look however you want it to. We have included some guides and examples below that can help guide you.

Guides:

- <https://www.analyticsvidhya.com/blog/2021/04/how-to-make-an-impressive-data-science-portfolio/>
- <https://www.dataquest.io/blog/build-a-data-science-portfolio/>
- <https://www.switchup.org/blog/how-to-build-a-data-science-portfolio-that-will-get-you-hired>
- <http://techfolios.github.io/index.html>
- <https://builtin.com/data-science/data-science-portfolio-projects>

Examples:

- <https://www.natasshaselvaraj.com/>
- <https://dhaitz.github.io/>
- <https://naledi.co.uk/>
- <https://gerinberg.com/>
- <https://jameskle.com/data-portfolio>

# NAIL YOUR INTERVIEWS

Interviews can be extremely daunting undertakings, but there is no way to avoid them when you are job searching. **Effective preparation** and **using answering techniques** make all the difference in both your attitude towards interviews and their eventual outcomes.

The following content is a summary of the most effective interview techniques. We strongly recommend using this guide along with the rest of your **THRIVE** content.

## Before the interview

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As you read earlier, it takes someone approximately 100 milliseconds to form judgements about your character. That is hardly enough time to utter a syllable, which means it is based purely on your appearance. **How you present yourself** is a critical part of any interview, and includes the obvious things like your grooming and choice of clothing. It also means arriving for your interview on time. Styling choices are your preference, but always aim to be neat and dressed professionally – smart-casual is typical. This applies to online interviews too.

For online interviews (which will probably be the majority of your interviews) it is key to have a neutral background, a good quality webcam and microphone, a quiet space, and most importantly, a good internet connection. **Make sure you test** these things before your interview.

Probably the most important thing you could do before any interview is **RESEARCH!** **Research is an important place to start** ahead of an interview. Many questions you are likely to encounter will reveal how much research you've done about the company. Some organisations place heavy emphasis on how much you know about them, and will even cut an interview short if you aren't prepared. Therefore, you must spend time looking at the company's website, social media,

and especially their latest annual report and results (if available), which will give you insight into the business. This research will help you to answer questions like “Tell me what you know about our organisation” and “Why do you want to work for us?”

## Answer structure and guidelines

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When in a high-stress situation (like an interview), it can be difficult to effectively organise your thoughts. Having a couple of **answer frameworks memorised** is critical in mitigating this stress. If you Google “interview questions answering frameworks”, you will find a lot of different methods. We’ll look at the two techniques that we have found to be the most effective and applicable to almost all questions/situations.

### Elevator pitch

An elevator pitch is what you would tell a potential employer about yourself in a short elevator ride. It’s also a good answer to the first question you’ll likely be asked: “Tell me a bit about yourself”. Since this question is open-ended and is asked when you’re most nervous, the potential for answering it poorly is high. Preparing it beforehand will help to give a **good first impression** and reduce any nerves you’re feeling.

The structure looks something like this:

**Education:** Introduce yourself, your major, and your class or year of graduation, which is really important for the recruiter to understand so they know what type of position you are looking for.

**Experience:** Talk about past work that you’ve done in previous internships or even student organisations and activities. Show that you are not just somebody who learns in the classroom and never does anything with your knowledge outside of the classroom.

**Projects (optional):** If you would like or if you don’t have much experience, supplement your elevator pitch by mentioning one or two of your most interesting projects.

**Conclusion:** Make sure to end strong. Don't just trail off while describing yourself. End with a brief reason why you are interested in the company you are pitching for or end with a summary of your strongest skills and a high-level background.



Generally, you will want elevator pitches to take one to two minutes in an interview.

## STAR method

### Behavioural-based interviews

This will often be the first interview that you will have. Employers use behavioural-based interviews to evaluate a candidate's past behaviour in different situations to predict their future performance. In a behavioural-based interview, potential employers ask candidates open-ended questions about specific situations they encountered in the past, and then, depending on the answer, probe to gain better and more detailed responses. **The general idea is that past behaviour predicts future behaviour.**

The STAR method is a system for breaking your answer down into four practical parts that reveal your thinking. This shows the interviewer that you use **critical thinking skills** and that you consider the consequences and business impacts of your decisions. You do not necessarily need to follow it exactly, but it will definitely help you deliver clear and compelling answers. STAR is an acronym for:

**Situation:** Describe the premise of the situation or problem. What needed to be accomplished, and more notably, why was it important?

**Target/Task:** What goals were you working toward or what is the definition of your project?

**Action:** Describe the body of your work and the actions that you took to solve the problem or achieve the goals at hand.

**Result:** What was the impact that you made and how did the team or users react? Why was it either a great learning experience or a resounding success?



**To effectively apply these techniques, we highly recommend that you practise a few answers before going into an interview.**

Below are some commonly used behavioural-based interview questions. The behavioural indicators are what the interviewer is looking for, so use those as a guideline for preparing your answers.

## **Team player/teamwork**

### **Behavioural indicators:**

- Is willing to put the needs of the team ahead of their own personal interests.
- Celebrates the wins of colleagues and is genuinely happy for them. The team's success and happiness motivate them.
- Competes with themselves and not with others.

### **Competency-based questions:**

"Tell me about a time you did something that positively impacted the well-being of your team."

- "What motivated you and why was that important to you?"
- "Can you think of another occasion when you put the team's needs ahead of your own?"

and/or

### **Behavioural indicators:**

- Has a "we" above "I" approach to the team.
- Happy to see teammates score "goals" and supports/encourages them in doing so.
- Sees strengths in teammates as an opportunity to improve and learn, and not as a threat to themselves.

### **Competency-based questions:**

"Have you ever faced a conflict while working with a team?"

- "What role did you play in the conflict?"
- "How did you approach the situation?"
- "What did you learn about the team during this process?"
- "What was the effect on the team dynamic?"

## Problem-solving skills

### Behavioural indicators:

- Able to assess a situation or task and use the information available to them to make a decision.
- Able to lean back into past experiences and adapt past working solutions to solve current problems.
- Able to distinguish useful information from irrelevant information or solutions when making a decision.

### Competency-based questions:

"Can you recall a situation where you had to deal with a work crisis? What was the problem, and how did you go about tackling it?"

- "What made you realise that there was a problem in the first place?"
- "What was the final outcome?"
- "What examples can you give me where you were able to use what you had learned in this experience to tackle other problems you encountered?"

## Organised

### Behavioural indicators:

- Able to establish goals and objectives and identify and prioritise what is urgent versus important.
- Plans course of action in advance to achieve goals.
- Able to delegate tasks and follows up on tasks to ensure they are completed.

### Competency-based questions:

"I'd like you to think back to a time or situation where you were really busy, and a large new project with lots of moving parts was assigned to you. Can you tell me about this project and the steps you took to make it happen?"

- "How did you go about prioritising the tasks and projects?"
- "What was the outcome?"

## Technical interviews

You will likely be required to undergo some sort of technical assessment during your interview process. There are so many different ways in which your technical skills are assessed that it would be impossible to cover everything in this guide. We have collated a few tips and tricks below, but ultimately, the best thing you can do is **practise, practise and practise!**

Fortunately, there are many platforms out there that make practising easy, and a lot of the same platforms are used by employers as standardised skills assessments. Employers that are looking to hire global talent rely heavily on standardised signals/assessments.

Having these signals on your professional profile could be the difference between being invited to an interview or your CV going to the bottom of the pile.

### HackerRank

[HackerRank](#) is the market-leading technical assessment and remote interview solution for hiring developers, and it is widely used by [top companies](#) all over the world.



We strongly recommend using **HackerRank** to practise your skills, earn badges, and prepare for technical interviews.

### Technical interview questions

Even the most talented scientists can struggle with technical interviews because they don't know what to expect. Practice will help with that! Some companies test your technical skills by asking you to solve a problem or explain a concept on a call. Much like with behavioural-based questions, there are some techniques that you can use to answer technical interview questions more effectively.



Basic topics you should know:

- Big O Notation
- Arrays and strings
- The basic data structures of your preferred language
- Trees and graphs, including search algorithms like breadth-first, depth-first, and binary search
- Sorting algorithms, like merge, quick, and bubble sort
- Recursion
- Basic statistics
- Basic SQL
- How to test your code

## How to answer questions

### 1. Start with asking clarifying questions

Interviewers sometimes make a question intentionally vague, particularly for case study questions. It's important to clearly define the business use case and metric before you begin to answer.

For example, if Netflix asks you: "Why are our number of users declining?", you can start by asking: "Over what period of time has this occurred?"

### 2. Actively provide bits of knowledge whilst working

This will give the interviewer a good sense of your knowledge whilst you are working on the problem. Imagine you are delivering the solution in an Agile environment – little bits of information show progress.

### 3. Make context statements

This is quite similar to the previous point. The difference is that this is where you provide reasoning for why you are doing something.

For example, why you made certain assumptions or chose to take a certain approach.

### 4. Asking for help the right way

Sometimes you need some help but you don't want to ask for a 'hint' as it doesn't look good in an interview. A better approach is to say

something like, "My assumptions are X and Y. I'm thinking of doing Z, but I'm struggling with solving [specific problem]."

You can also ask questions like:

- "Do you have any thoughts?"
- "Do you think my assumptions are accurate?"

Things to remember:

- The interviewer will be evaluating your ability to **solve unseen problems**. If you have seen the problem before, it is best to tell them.
- You are more likely to be judged on your **thought process** and the way you'd tackle the problem, rather than if you provided the correct solution or not.
- **Don't give up!** The interviewer could have asked you a really difficult question to try to understand how you work under pressure. You don't know what the interviewer is looking for when they ask a question.

## Case study interview questions

Case study interviews are typically used by **management consulting companies**, as well as increasingly by **financial services companies** (especially banks) when interviewing for technical roles.

The general idea behind a case study is to give the candidate a realistic but usually **made-up business problem** that requires integrating your analytical skills, your logical and problem-solving skills, and your ability to understand a business or a market.

Things to remember:

- The interviewer will be testing your ability to apply your **mathematical and logical mind** to a simulated business problem that mimics the real world.
- You often won't be allowed to use a calculator, so brush up on your **mental maths/arithmetic**.

- The process of walking through your **thinking and problem-solving** is more important than the final answer, so be ready to talk your interviewer through what you are doing.
- You need to **think carefully about how businesses make money**, how they can improve revenue, reduce costs, compete better, and pivot into new markets. These aspects will usually be present.
- **Ask lots of questions.** Interviewers are looking for employees who solve problems by getting to the root of what is going on.

Video examples:

- [Profitability Case – Solving a Management Consulting Interview Mock Case –McK style](#)
- [Mock Consulting Interview - Consultant](#)
- [McKinsey Case Interview Example - Solved by ex-McKinsey Consultant](#)

## At the end of an interview

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**Ask thoughtful questions!** It will show that you are actively interested in the company and the position you are interviewing for.

Some questions you could ask:

- “What tools do you currently use and would you consider changing/adding tools to your toolset?”
- “What are your favourite aspects of working at [the company]?”
- “If I were to start on the data science team tomorrow, what would my first task be?”

## After an interview

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After an interview, send a **kind and grateful message**. This can also be a chance to correct any mistakes you may have made or to add further insights into problems that you were presented with. A word of caution: do not overdo it here as it can come across as unauthentic, and a really long email might irritate the hiring manager.

## When can I follow up?

You need to wait a week after your interview before following up on the status of your application.

## How do I follow up?

Keep it simple. Just send a kind message asking about your application. No need to go into too much detail.

## Learn to cut your losses

Unfortunately, you are likely to be ghosted by employers throughout your job search – it is a frustrating reality. If you have not heard back from an employer after following up with them a couple of times, it is probably best to cut your losses and focus your energy elsewhere.



# FINDING OPPORTUNITIES

You can find opportunities pretty much anywhere, so much so that looking for a job can be overwhelming. Before you start your job search, you need to define exactly what you want. This will be your guide for where to look. There is a lot of content available on **THRIVE** to help you find your **WHY**.

The following resources are designed to help inform your search. These are not exhaustive lists of recruiters and employers, but it is a good place to start.

## Networking

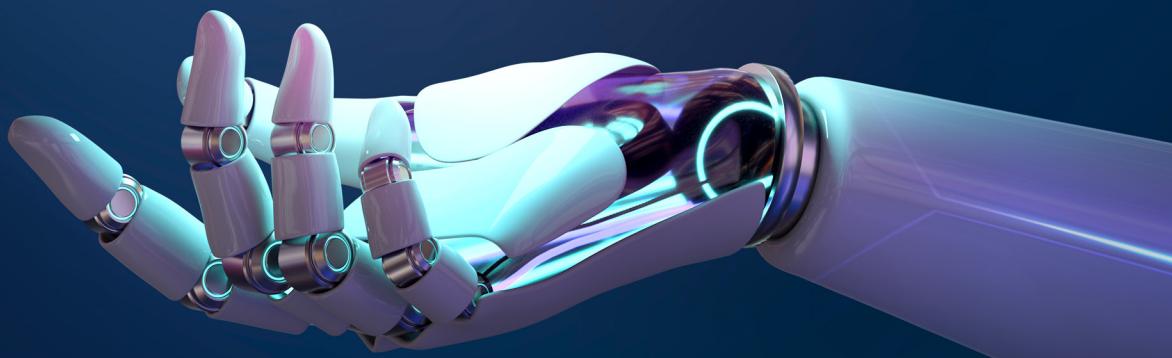
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Referred candidates are about 15 times more likely to get a position. Think of it as another vetting mechanism that companies/recruiters use. One of the ways to increase your chances of being referred is to build your network and be an active member of a data science community. A good place to start is with your classmates.

## Job boards and aggregators

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Job boards are where companies pay or sign up to advertise jobs, and they are a great place to find roles that would not necessarily be advertised on LinkedIn, for example. Aggregators are a combination of job boards and web scrapers that collate jobs. They are probably the quickest way to identify opportunities.



## AI Platforms

Imagine a recruitment agency but with the power of AI that helps to source, vet, and match candidates. These types of platforms are relatively new in the recruitment space, but a lot of traditional recruiters are beginning to embrace some level of AI in their processes.



[\*\*Here is a list\*\*](#) of job boards, aggregators, and AI platforms. We highly recommend setting up notifications on a few of these sites so that you get relevant jobs sent directly to your inbox.

## Traditional recruiters

Finding the right candidates is a really time-consuming process, and a lot of businesses do not have the time or resources to do it effectively. This is where recruitment agencies come in – they source and vet candidates on behalf of companies. Recruiters have a vested interest in your success as they only get paid per successful placement. They can be extremely helpful to your job search, as they broaden your reach and get your profile in front of companies that you may not have been able to.

A simple Google search will reveal that there are a lot of recruitment agencies. [\*\*Here are some\*\*](#) recruitment agencies that we have worked with before. This list is certainly not exhaustive, but the agencies listed are either ones we have worked with before or ones that focus on tech talent.

## Key employers

[\*\*Here is a list\*\*](#) of some key employers that we have worked with over the years. You will notice that a lot of the companies are either in the financial services or telecommunications industries. We have found these industries to have the highest demand for data science skills in South Africa. Having said that, don't limit your search to only those industries!

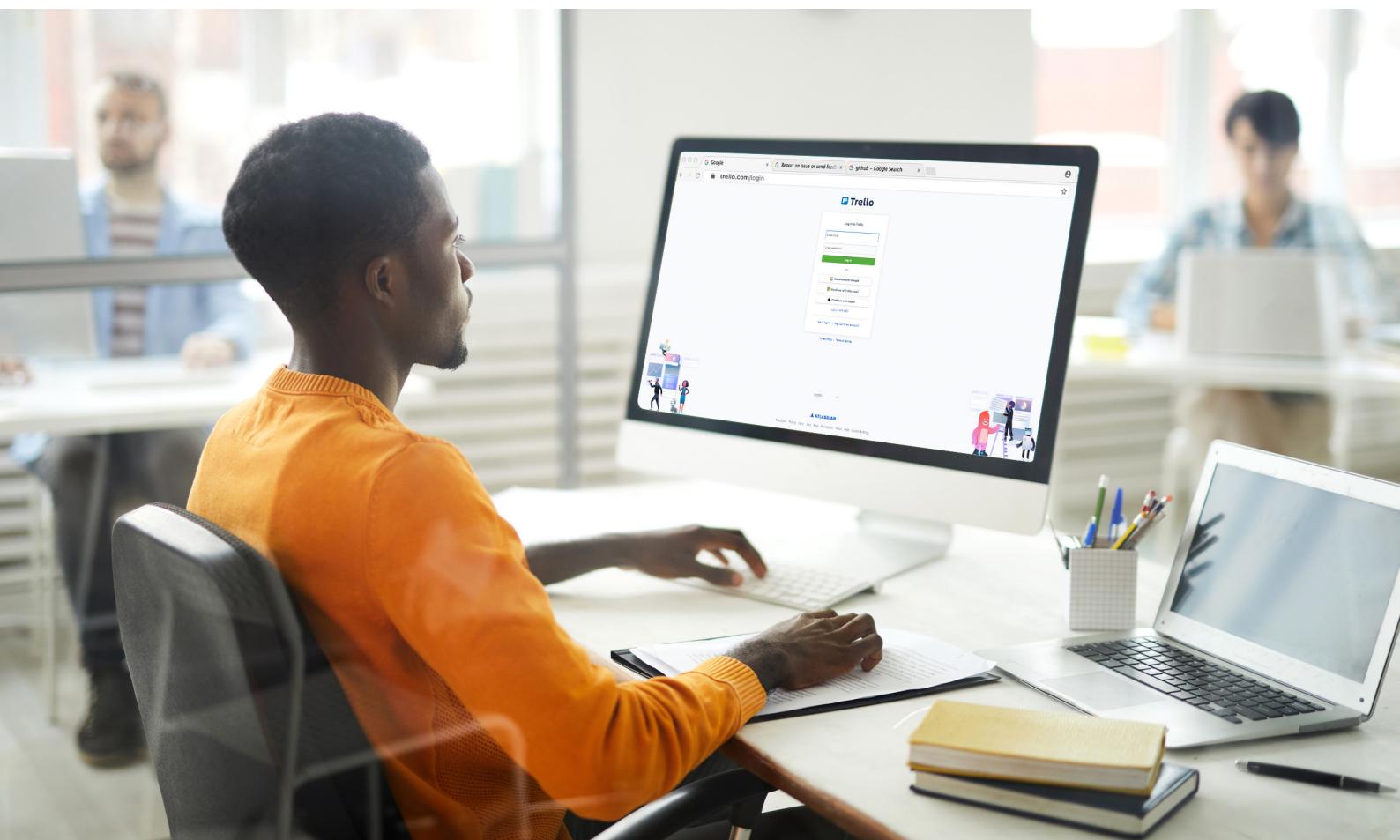
# MANAGING YOUR JOB SEARCH

You will often hear people say that looking for a job is a full-time job. There is some truth in that statement. You have to put in a lot of time and effort to get the results. Using a tool to manage your job search will help you **reduce the admin and the stress.**

We suggest using a tool like [Notion](#) or [Trello](#) – both are free and are widely used by companies all over the world, so you will also be learning/practising a valuable skill.

[\*\*Here is a Notion template\*\*](#) that we have created to get you started. You can duplicate the page if you want to use it.

The idea is that you create a card/page per job application, and on that card, you keep all the information that is relevant to a particular application.





# CONCLUSION

We have covered quite a lot in this resource. The intention is not to overwhelm you but rather to empower you to take control. There are a lot of necessary interventions to undertake to have a successful outcome, so please take heed of the guidance offered.

**Good luck, and all the best!**