



# Employment Fundamentals Workbook

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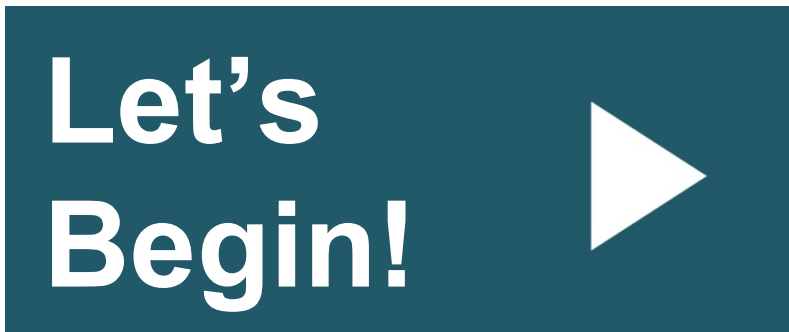
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# 1 | Getting Started

# SECTION 1: GETTING STARTED



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## WELCOME

Thank you for joining Erdős, and congratulations on embarking on the next phase of your career! This is your Employment Fundamentals Workbook and is a resource to be able to assist you as you progress toward your goals and interests. The purpose of this guide is to provide you with helpful information in order to evaluate career options, assist you in your job search, and provide you with the fundamentals necessary in order to secure employment.



## GOALS

Upon completion of this guide, you should be able to:

- Identify the necessary steps to acquire a job in industry.
- Align employment expectations with personal needs, goals, and best practices.
- Understand the resources available to support a search for employment.

# ERDŐS OVERVIEW



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## ABOUT

The Erdős Institute is a multi-university collaboration that is focused on helping PhDs get jobs they love at every stage of their career. The organization was founded in 2017 and helps prepare, train, and place a diverse pool of graduate students, postdocs, and graduate alumni in various professional roles and positions. Participants from member institutions have access to all of the programming and resources that the Institute provides such as career exploration seminars, data science bootcamps, interview preparation workshops, and career coaching.

Common shared concerns that led to the development of The Erdős Institute:

### *Graduate Students*

1. I don't know how to get a job outside of academia and my advisor is unable to help me.
2. There's no professional/career development programming for PhDs in my department/university.

### *Faculty*

1. I've got a really bright grad student that hasn't received a job offer yet, do you have any in your department?
2. My student wants to explore a career in industry. I don't know how to mentor them for that.

### *Companies*

1. We'd like to interact more with grad students and faculty.
2. We can't compete with the tech giants in hiring only data science PhDs. We need to turn to other universities and other departments/programs.



**Erdős aims to  
bridge the gap**

## FUNDAMENTAL CONCEPTS

### DEVELOP YOUR BRAND

To understand the fundamental concept of developing your brand, you should think of the job search as an activity of marketing or sales. You are offering your knowledge, skills, and abilities as an employee to a company or a hiring manager. Therefore, you want to show them what separates you from others and how you can add value to their organization.

To develop your personal brand, you must first understand where you currently are and honestly assess your skills. By researching how your skills fit the labor market and how they align with the companies you are interested in working for, you can then shape your marketing message to target your desired employer.

### THINK LIKE AN EMPLOYER

To *Think Like an Employer* means you will put yourself in the employer's "shoes" as you consider where you will look for an open job, what you will write on your resume, and how you present yourself in an interview. By using this mindset throughout each step of the process, you can better meet the needs of the organization.

### MAXIMIZE YOUR RESOURCES

Through Erdős, you have access to various resources, information, and support to help you succeed. This guide will provide numerous resources throughout, and many more can be gathered from the Erdős job help website at: [Job Help | The Erdős Institute \(Erdosinstitute.org\)](#). Resources presented are a mixture of online tools, websites, organizations, and follow-on services. Your support does not end when with this guide alone. You are encouraged to use as many of the resources that are made available to you through the Erdős institute, which include seminars, courses, coaching, job postings and corporate connections.

By understanding and applying these fundamental concepts along with the tools and tactics provided, you will set yourself apart from other job applicants who do not practice these techniques.

Be aware that the time it takes to secure a job varies according to the level of job you are seeking. However, research studies and recruiters confirm using these techniques can positively influence your job search timeline as outlined by the department of labor.





# HAVE YOU SET UP YOUR ERDŐS PROFILE ?

The first step, if you haven't done so already, is to create your identity within the Erdős Institute portal by creating a profile and providing the requested information so that your career advisors may best be able to assist you. Some of the information that will be requested includes your contact information, current status, relevant skills, goals, experience, and education.

You can do this by clicking on the “create a profile” tab found within the home page and adhering to the instructions that are provided.



## ACTIVITY: Establish Profile

Take a few minutes to create your profile within the Erdős portal.

Create your profile

Link: <https://www.Erdosinstitute.org>

DEVELOP YOUR  
BRAND

1. Click on the “Create a Profile” tab

**PROGRAMS & SERVICES**

PhD Career Development programs and Industry Placement services designed in partnership with our PhD alumni mentors and corporate hiring partners.

The application window for our Spring 2024 Cohort is now open.

**CREATE A PROFILE**

**CAREER DEVELOPMENT**

**Career Exploration Seminars**

Weekly seminar series connecting you to PhD alumni peers working outside of academia. Learn from their collective experiences and get exposed to a diverse range of career opportunities.

**INDUSTRY PLACEMENT**

**Corporate Connections**

We work with our vast network of corporate members and PhD alumni to connect you directly with lead recruiters and hiring managers looking to fill open positions.

2. Fill out relevant information

**The Erdős Institute**  
**CREATE YOUR ACCOUNT**

Already have an Erdős account? [Log In](#)

First Name \*  
Last Name \*  
Email \*  
Preferred Password \*  
Phone  
How did you hear about the Erdős Institute? \*  
I want to... \*  
Please choose one

Submit Form

**Contact Information** | **Current Job Goals** | **Demographic Data** | **Save Changes**

**On market for:**

- Internships
- Part-time/contract
- Full-time jobs

**For positions in:**

- Academia
- Industry/Corporate
- Government

**Job categories interested in:**

- Data Scientist/Engineer/Analyst...
- Quantitative Research, Finance
- Software Engineering
- Quantum Computing
- UX Research/Design
- Professional/Science Writing

Please list others

**Comments about your job/career goals:**

Please let us know about specific industry sectors or companies you may be interested in. Or if you would prefer to work in a smaller org/startup environment vs a large organization. Also, please feel free to provide any other information which you feel would be helpful in us understanding your career goals.

**Geographic Preference:** Specific cities or region

**Start full-time job by:** Select a date

**Skills** | **Non-Academic Work** | **Academic Work** | **Education**

**Programming languages and/or software experience:**

- python
- R
- SQL
- ruby
- HTML
- CSS
- javascript
- Java
- C
- C++
- julia
- MATLAB
- git
- docker

Please list others

**Other skill sets, qualities or achievements:**

Please describe any other skill sets, qualities or achievements that you would like to highlight for potential employers, e.g. languages, leadership roles, conference/seminar organization, grants, research or teaching awards, etc.

Save Edits





# WHERE ARE YOU NOW?

Whether you have solidified your decision in transitioning to industry, seeking to expand your options, or seeking to learn more information, it is important to identify what your goals and interests are so that you may begin outline roadmap toward your desired end state.

“What are your skills?”

“What do you want to do next?”

Your answer to these questions determines where you begin your job search. Once you determine where it is you want to go, you can then determine the path in order to be able to get there.

## DEVELOP YOUR BRAND

*Start with identifying what you wish to do.*



### ACTIVITY: WHERE ARE YOU NOW?

Take a few minutes to complete answer the following questions.

1. What are your skills (background, experience, degree, etc.)?

2. What do you want to do next? What are you most passionate/interested in?

3. Action statement.

My primary goal is to pursue a career in \_\_\_\_\_ with a focus on \_\_\_\_\_. In order to be able to obtain that goal, I need to:

- a.
- b.
- c.

# THE CONTEMPORARY WORLD OF WORK

Whether you are seeking full-time employment, part-time employment, or internships, what do you know about today's workforce environment and current trends?

Understanding the modern world of work and current employment trends is helpful as it can inform where, when, and how you search for that best fit job or career.



## CHANGES IN EMPLOYMENT

Employment in the United States has seen significant changes over the past decade and especially since the onset of the COVID-19 pandemic. For example, the number of employees working from home almost doubled and over 40% of all job interviews now incorporate video teleconferencing. Are you familiar with the modern work environment, and have you determined which preferences are most important to you?

### What are your preferences?

- Remote, hybrid, or in-person work?
- Start up vs an established company?
- Work / life balance?
- Geographic location?
- Organizational values / mission?
- Professional growth opportunities?
- Mentorship opportunities?
- Team vs independent work?
- Income, status, social contribution?
- Desired benefits?

### Did You Know?

According to the U.S. Department of Labor, the projected growth percentage for data science occupations from 2022-2032 is 35% (much higher than average)?

### More Information

According to the Bureau of Labor Statistics, the majority of Americans change jobs every five years.



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# 2 | Researching

# SECTION 2: RESEARCHING



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In this section, we will establish a foundation for your job search. We will look at important employment research topics, outline your skills, and identify how to develop SMART goals.

Conducting research will allow you to take steps to answer the following questions:

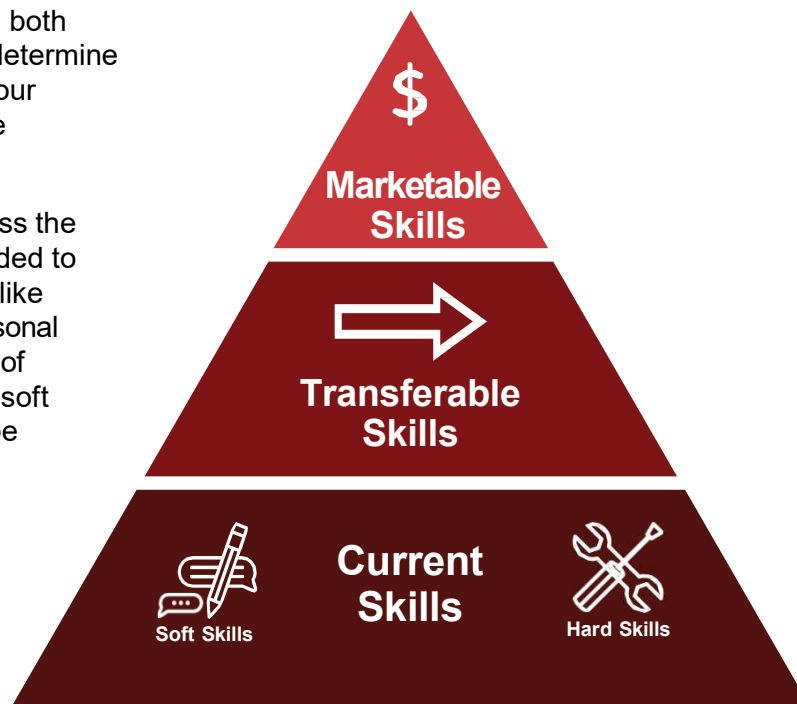
1. What are my marketable skills?
2. What are my career development resources?
3. How do I create SMART goals for my career?

The answers to these questions are important because they will help you continue to refine your plan in order to reach your goals.

## WHAT ARE MARKETABLE SKILLS?

Identifying marketable skills, both hard and soft, will help you determine how well your skills match your desired career as you create your career plan.

Hard skills usually encompass the knowledge and abilities needed to do a specific job. Soft skills, like communication and interpersonal skills, can apply to a variety of occupations. Both hard and soft skills are valuable and can be transferable.



### PRO TIP: **KNOW YOUR MARKETABLE SKILLS**

*Conducting a side-by-side comparison of the job skills you have and those that your desired employer is looking for will greatly enhance your understanding of what you have to offer as a job applicant.*





## ACTIVITY: WHAT ARE SOME OF YOUR RELEVANT SKILLS?

Below are a few examples of various skills that you may have that could be relevant to a hiring manager.

### HARD SKILLS

- Cloud computing
- Statistics and probability
- Advanced mathematics
- Machine learning
- Data visualization tools
- Database management
- Python Coding
- Microsoft Excel
- R programming
- Data wrangling
- Proficiency using Java / JavaScript
- Linear Regression
- MATLAB
- C
- C++
- SQL
- Ruby
- HTML
- CSS
- Docker
- Git
- Software development

### SOFT SKILLS

- Leadership
- Ability to take initiative
- Communication skills (verbal/written)
- Teamwork / collaboration
- Project management
- Analytical thinking
- Work ethic
- Time management
- Creative problem solving
- Communicating complex tasks
- Planning agendas / conferences
- Establishing/meeting goals & objectives
- Supervising others
- Training others
- Writing publications or technical documents
- Flexibility
- Receptive to feedback
- Research development
- Intellectual curiosity
- Attention to detail
- Fluency in various languages
- Professionalism

List 6 of your top skills below.

- |    |    |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. | 6. |

Transferable skills are useful across many industries, and you can easily “transfer” them to another job, career, or industry. “Marketable” skills are hard, soft, and transferable skills that are in demand by employers in any chosen location. These skills are easy to sell, promote, or “market” to an employer.



## ACTIVITY: GAP ANALYSIS

Identify where your gaps are that you will need to fill in order to reach your goals?



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### WHERE ARE YOU NOW?

1. Current occupation (student, assistant professor, unemployed, etc.):
2. List the experience and skills that you have (use previous page to assist):
3. List the level of education and training that you have:
4. List any credentials you may have (licenses, certifications, etc.):

### WHERE ARE YOU GOING?

1. Desired occupation:
2. List the experience and skills this occupation requires:
3. List the level of education and training this occupation requires:
4. List any credentials this occupation requires (licenses, certifications, etc.):

### WHERE DO YOU NEED TO FILL IN THE GAP?

1. List the experience and skills you still need to obtain:
3. List the level of education and training you still need to obtain:
4. List any credentials you still need to obtain (licenses, certifications, etc.):

# WHY IS LABOR MARKET INFORMATION IMPORTANT?

Labor market research supplies essential information to make your career decisions. You will discover different experiences, education, and credentials required for your chosen career. Research also provides salary ranges to help you decide whether your career choice will meet your financial needs.

When you conduct labor market research (LMR), especially for determining the competitiveness of wages, you need to understand these key terms.

## LABOR MARKET RESEARCH KEY TERMS

### Labor Market Information (LMI)

- Information about a career, including:
  - local market demand
  - education requirements
  - training requirements
  - salary rates
  - industry trends
  - growth potential

### Labor Supply

- The availability of suitable employees willing to work at a given wage.

### Labor Demand

- The need for employees in a particular market at a prevailing wage.

### Labor Market

- The supply and demand for labor. Employees provide the supply and employers the demand for labor. Employees and employers depend on an exchange of information about:
  - wage rates
  - conditions of employment
  - level of competition
  - job location

## WHAT IS YOUR MARKET VALUE?

*“Market value can be defined as the price your knowledge, skills, and abilities (KSAs) would bring based upon the industry and location of the position.”*



**K+S+A = VALUE**

When assessing your knowledge, skills, and abilities, think about how one of these might cross over into other areas. You can use this information to persuade the employer that you are the best candidate and/or negotiate higher pay or better benefits, but only if you have done your due diligence and researched this information.

# WHAT IS CAREERONESTOP?

CareerOneStop, <https://www.careeronestop.org/>, is a website that can be used in order to research career, training, and job search information that is managed by the Department of Labor. The website serves job seekers, businesses, students, and career advisors with a variety of free online tools, information, and resources.

Use CareerOneStop as a source for career exploration, training, and to research labor market information to identify transferable skills which are most marketable for the career you want. CareerOneStop has a Toolkit section which makes it easy to conduct LMR. Choose specific topics such as Tools & Technology Finder, Salary Finder, or the Occupation Profile.

## CareerOneStop Occupation Profile

The CareerOneStop Occupation Profile provides occupational details, including duties, earnings, required education/training, and skills.

Begin your occupation search by entering a keyword for a career, a job title, or a type of work. Then enter your location. The search results will provide 18 cards or topics which contain specific career information. Select the Question Mark icon in each card's subsection to view an expanded description. Expand data and/or select hyperlinks to view additional information. You can also download the information for later review.



## ACTIVITY: CareerOneStop Occupation Profile Demonstration

In the following website demonstration, let's learn how the CareerOneStop Occupation Profile can be used to explore a career's skills in detail. For the purpose of this demonstration, we will take a deeper look at one of those jobs, Data Scientist, to find out how the skills relate to market value.

1. **Access** the CareerOneStop website, <https://www.careeronestop.org/>
2. **Select** Toolkit, then Careers, and then Occupation Profile.
3. **Enter** in Data Scientist as the keyword, or an occupation which interests you, to begin your search. If you know the geographic location in which you would like to be employed, feel free to enter that information as well.
4. **Identify** the skills that are common for the respective profession outlined on the site. Of those, which do you feel that you are most proficient in and will make you most marketable?

Feel free to explore the tools available on the site or other jobs that you may be interested in.



# INFORMATIONAL INTERVIEWS

Now that you have identified your marketable skills and conducted labor market research, you may find that you still have questions about a career path, an industry, or a company.

Conducting an Informational Interview is a way to explore career options and connect with people from companies and industries you are interested in. The goal is to gain insights into the company or occupation.

Think of it as more of a conversational meeting. It could be a meeting where you interview someone already doing the job or someone who hires for that position. It could also be a meeting with someone you met on social media or at a career fair who already works for that specific company.

Regardless of how long your discussion is scheduled for, prepare your questions prior to the meeting. A few examples include:

- Ask questions about the type of work, the industry, or their career path.
- How did they become interested in the industry or get started in this career field?
- What one piece of advice would they give someone entering the field?
- What is their education level?
- Who else in the industry would they recommend contacting?
- What makes a resume impressive for your organization?
- What are employers looking for within this company?
- How should I best prepare for a potential interview?

Be prepared to answer questions if any are asked of you. You may ask them to critique your resume, but don't turn the meeting into an informal job interview. Remember, this is an interview for you to gain information and not the other way around.

The added value that comes with informational interviews is that whomever you speak with becomes part of your network, a professional connection. Further value is that you may discover internship or apprenticeship opportunities.



## MAXIMIZE YOUR RESOURCES

### Tips:

- **Make a good impression.** This person may provide a referral that could lead to a job.
- **Keep it short.** Limit your initial interview to 15-30 minutes based upon how the conversation is going. Be respectful of their time.
- **Follow Up Actions.** Conclude the interview by discussing any follow up actions you will take based upon their recommendations.
- **Appreciation.** Thank them for their time and follow up with a thank you note or email afterwards.

# WHAT ARE SMART GOALS?

So far you have learned about your marketable skills and conducted labor market research.

Now, take time to think through things that might be important to you in a job. These things might include interests, work styles, values, or location.

Career goals are very important, so we're going to learn how to create a measurable framework to help you succeed by using SMART goals.

SMART is an acronym. You may have heard of SMART goals before. Some examples use different words for SMART. For this example, we will use SMART to mean Specific, Measurable, Achievable, Relevant, and Time-based. When making career goals, you want the goals to meet as many of the SMART characteristics as possible.



**SPECIFIC**



**MEASURABLE**



**ACHIEVABLE**



**RELEVANT**



**TIME-BASED**



## ACTIVITY: SMART GOALS



So what are your goals?

1. Specific: What do you want to accomplish? Who needs to be included? Why is this a goal?
2. Measurable: How can you measure progress and know if you've been successful?
3. Achievable: Do you have the necessary skills? If not, can you obtain them?
4. Relevant: Why are you setting this goal now?
5. Time-based: What's the deadline?

S.M.A.R.T. Goal (Review your responses and generate your goal statement based on the answers you provided)

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# 3 | Building Your Personal Portfolio

# SECTION 3: BUILDING YOUR PORTFOLIO



Now that you are familiar with conducting employment research, let's begin building your personal portfolio. Your job search portfolio will contain several items you will want to have on hand as you make connections and meet employers. It is important to keep your portfolio current. Gathering these items into one place will also help you develop your personal brand.

In this section, you will learn about developing your resume and discussing your work history. Finally, you will learn about the importance of using the P.A.R. method to stand out as well as drafting your professional introduction.



## WHAT IS PERSONAL BRANDING?

Personal branding is identifying what is unique about you in order to be able stand out amongst competitors. It is how you present yourself to others and potential employers.

Your brand consists of your characteristics as an employee, your accomplishments, experience, and skills. Use these things to differentiate yourself from other job seekers and professionals in your field.

Creating your personal brand includes looking at your work history holistically, then choosing select pieces to create a targeted resume.

## CREATING YOUR PERSONAL BRAND

Your personal brand includes:

- writing a resume that emphasizes your unique employment experience and contributions
- creating a professional introduction

We will dive into more about both of these topics within this section.

### TIPS

- Align with your values
- Build on your strengths
- Have a focus
- Be consistent
- Be authentic
- Create a positive impact





# WORK HISTORY OUTLINE

Part of creating your personal brand includes creating a Work History Outline. It is the foundation for the development of your resume.

Your Work History Outline is a complete job list. It includes the employer’s name and location, your job title, and the start and end dates you worked in each job.

Review previous employment documentation, evaluations, transcripts, job descriptions, or other similar resources to help you remember dates, job titles, and details from your experiences.

## DEVELOP YOUR BRAND



### ACTIVITY: WORK HISTORY OUTLINE

Use the following template to complete your Work History Outline.

1. Employer Name & Location: \_\_\_\_\_

Job Title: \_\_\_\_\_ Dates: \_\_\_\_\_

2. Employer Name & Location: \_\_\_\_\_

Job Title: \_\_\_\_\_ Dates: \_\_\_\_\_

3. Employer Name & Location: \_\_\_\_\_

Job Title: \_\_\_\_\_ Dates: \_\_\_\_\_

4. Employer Name & Location: \_\_\_\_\_

Job Title: \_\_\_\_\_ Dates: \_\_\_\_\_

5. Employer Name & Location: \_\_\_\_\_

Job Title: \_\_\_\_\_ Dates: \_\_\_\_\_

6. Employer Name & Location: \_\_\_\_\_

Job Title: \_\_\_\_\_ Dates: \_\_\_\_\_

## RESUMES

We will now look at the two types of resumes: a master resume and a targeted resume.

### MASTER RESUME

A master resume:

- lists and completely describes your skills, work experience, training, certifications, and education
- is a source document for you to store information on your accomplishments and throughout your work history
- is used to create each targeted resume

Begin with your Work History Outline and list each of the jobs you have held and projects you have participated in. This forms the basis for your creating master resume.

Then add additional or collateral duties and accomplishments for each job title identified in your Work History Outline. Continue building your master resume by adding your education and awards. It's like building blocks.

The “relevant” content will be used from your master resume to create a targeted resume.

If you do not write down your accomplishments and experiences, it can easily be forgotten and not captured within your resume.



### TARGETED RESUME

A targeted resume focuses on, or targets, a specific job posting highlighting the skills and experiences you have gained, **relevant to that position.**

A targeted resume uses the master resume as a source document to customize a response to a specific job opening.

Analyze the job posting to identify content from your master resume similar to what you find in the job announcement. Pull that content from your master resume into a separate document. This will be your targeted resume for that position.

To stand out from other applicants, write your work experience in a way that tells the employer how you have added value to positions previously held. You do this by focusing on your achievements rather than your responsibilities by using P.A.R. statements.

Since a targeted resume is written for the specific job, position, or application, you will create a targeted resume for each employment opportunity.

#### **Quick Tip**

*Remember, it is important to be clear and concise.*

## TARGETED RESUME

### What it is

- Focused work history: Highlights the skills and experiences you have gained relevant to a specific position or job opening

### Benefits of Using

- Easy for employer to see your relevant skills, experience, and qualifications which match the job requirements
- Focuses on your achievements rather than your responsibilities
- Creates first impression of you (as an applicant or candidate)
- Maximizes your interview chances, which is the goal of a resume

### Serves as...

- Your application document

### Formatted

- Typically Reverse Chronological but may be determined case by case

### Is...

- Customized to the position and given to the employer

### Includes

- Employer or organization's name
- Employer or organization's location: city and state
- Job Title
- Start and end dates - month and year
- Skills summary
- Responsibilities and detailed job duties as related to the position
- Accomplishments as related to the position
- Education and Training as related to position
- Awards, accomplishments, and publications
- Additional information may be required, e.g., Federal applications usually include a longer and more detailed work history and may ask for salary history.
- Your current contact information (may omit city/state but never use street)
- Relevant links to additional information

### Quick Tip

*A well-written targeted resume quickly shows the potential employer why and how you are the ideal candidate for their job opening.*



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# SO WHAT'S THE DIFFERENCE BETWEEN A RESUME AND A CV?

## Resume

- Most often should be one page and hardly ever is longer than two pages.

### Summary

- A summary statement is often used.

### Accomplishments

- Highlights accomplishments and transferrable skills.

### Education

- Usually supplements work history and placed toward the end.

### Chronology

- Experience should be placed in reverse chronological order.

## Curriculum Vitae

- Multiple pages.

### Summary

- A summary statement is never used.

### Accomplishments

- Emphasizes credentials vs performance.

### Education

- Education is focal point of CV which should be outlined in detail.

### Chronology

- Typically in reverse chronological order, however, time coverage is not as important.

## Basic Elements for Resume

- Name and Contact Information
- Summary
- Skills
- Experience
- Projects
- Licenses & Certifications
- Education
- Optional if Relevant (publications, awards, leadership experience, spoken languages, speaking engagements)





# RESUME GUIDELINES

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## Summary

- 2-3 sentences (no more than 5 lines of text) about your professional background, main areas of interest, and major skills. Attempt to align with the job description (use key words found within job description within your summary).

## Skills

- Outline technical languages, packages, tools, and quantitative techniques that you are proficient in. Ensure to highlight skills that were requested within the job description that you are proficient in.
- If relevant, include soft skills that may have been referenced by the organization.

## Experience

- Chronological from most recent to least recent. Include research experience, professional industry experience, and teaching experience. Prioritize and expand upon what is most relevant as it pertains to the job that is being applied for.
- The first bullet of each position held should be a short summary of what the position entailed. Be sure to include what your responsibilities were and that you adhere to P.A.R. Also, make sure to use powerful action verbs (created, developed, integrated, etc.) and attempt to quantify the results whenever possible (ex: increased optimization by 20%, accuracy of 93%, etc.)

## Projects

- List short term projects where you applied skills relevant to the specific job.
- Include Erdős Institute Data Science Boot Camp, and discuss the final project, outline the skills used, and highlight the outcomes achieved.

## Education

- Describe your educational background so that it confirms the way that you meet the educational pre-requisite.

## Optional Information

- What other assets or value can you bring to the organization that can set you apart from your competitors?





**PRO TIP:  
USE P.A.R. TO STAND OUT**

*Distinguish yourself as an applicant by creating achievement statements that demonstrate your ability to perform, and even excel, as an employee. Quantify your results when possible and start each sentence with an action verb (integrated, developed, etc.).*

**P.A.R. STATEMENTS**

**What sets you apart from other people with similar qualifications? What is your brand?**

To answer these questions, the most effective strategy you can adopt in your job search is to **think like an employer**.

You can apply this employer-focused mindset to every aspect of your search, from writing your resume to networking, interviewing, and negotiating.

As you think like an employer, you will be able to identify what knowledge, skills, and experience an employer would like to see. Let's apply this concept to what you have already completed in this workbook. Think about how many of your peers have similar educational backgrounds, experiences, or skills.

Rather than just summarizing your skills, you can use the P.A.R. Method to write targeted accomplishment statements to stand out and bring your work to life.

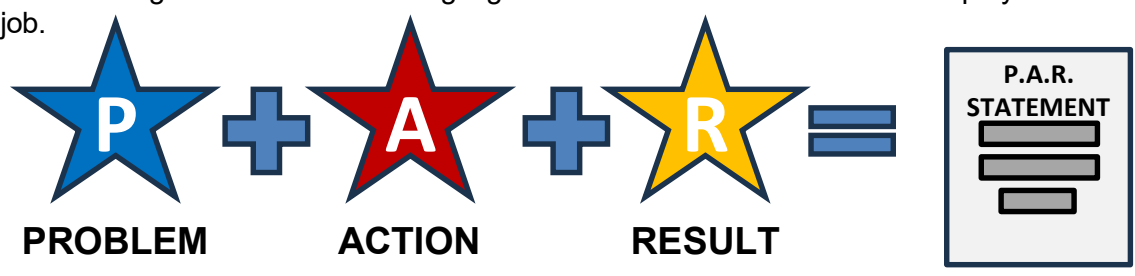
**WHAT IS THE P.A.R. METHOD?**

**THINK LIKE AN  
EMPLOYER**

P.A.R. is an acronym for **Problem, Action, and Result**.

The P.A.R. Method is a three-step technique that will help you discuss how you used your skills to achieve your goals or assigned tasks. It uses brief examples that give a fuller picture of your competencies and how you previously used them. Not every statement on your resume needs to be in P.A.R. format, but the majority should use this technique.

The P.A.R. Method shifts the focus from job duties to what you have achieved and your impact in that position. Using the P.A.R. Method highlights skills that are relevant to the employer and to your future job.



	Candidate A	Candidate B
<b>EXAMPLE</b>	<input type="checkbox"/> Organized large data sets to allow for improved interpretation.	<input type="checkbox"/> Organized over 500,000 customer data transactions to form interpretable groups of customer purchasing behavior using the k-prototypes algorithm.
	<input type="checkbox"/> Created a model to predict on-time departures.	<input type="checkbox"/> Created a classification model to predict on-time flight departures in North Carolina with 90% accuracy.



## ACTIVITY: WRITE A P.A.R. STATEMENT

Practice setting yourself apart by writing a P.A.R. Statement.

**STEP 1.** Write one job responsibility or task from a previous work experience or project. What was the context of the situation?

**STEP 2.** Review the job responsibility and ask yourself the following questions?

1. Did I implement any new processes to improve things?
2. What did I do that went above and beyond my normal responsibilities?
3. What problems did I solve, and what skills did I use to solve it that would be relevant to an employer?
4. What were the results of my actions and am I able to quantify them somehow?
5. What is a powerful action verb I can use to start the sentence with?



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## Summary

I am a quantitative molecular biologist with 8 years of research experience in bio-medicine, bioinformatics, and cancer research with experimental data. While working as a full-time researcher, I became a Data Scientist and developed programming skills in Python, R and machine learning while. I am pursuing Data Science related positions in the pharmaceutical and biotech industries because I'm passionate to improve human health through effective Biomedical data science.

## Skills

- **Programing Languages:** Python, R, VBA, Java Script and D3.js, HTML, CSS
- **Python Packages:** Numpy, Scipy, Matplotlib, Pandas, Plotly, Scikit-learn, Flask, BeautifulSoup
- **Machine Learning:** Linear/Logistic Regression, KNN, KMeans, Random Forests, Support Vector Machine, Principal Component Analysis, Tensorflow, Neural network and Deep learning, PySpark (Big Data Framework)
- **Databases:** MySQL, PostgreSQL, MongoDB
- **OS and Platforms:** Bash, GitHub(<https://github.com/ShiraliObul>), MacOS, Windows, Jupyter Notebook and Jupyter lab, Visual Studio Code, Google Colab, R studio, Tableau, AWS(S3, RDS)
- **Language English** (professional); Chinese (bilingual); Italian (basic); Uyghur (mother tongue)
- **Others:** A team player with great work ethics, excellent collaboration and communication skills. Avid reader, Basketball and Ping Pong player at competitive level

## Selected Projects

### Data Science Projects

- **CoverMyMed Copayment Prediction** Developed and tested different machine learning models that reduce bias to predict patient copayment ahead of time. [GitHub Link](#)
- **NYC Bike Accident analysis** Played a project manager role to lead a team. Performed comprehensive exploratory data analysis with python, visualizations. [GitHub Link](#). [Tableau Link](#)
- **Neural Network Charity Analysis** Developed deep-learning neural networks with the TensorFlow platform in Python, analyzed and predicted whether applicants will be successful if funded by Alphabet Soup. [GitHub Link](#)
- **Mission-to-Mars** Created a ETL loop from web scraping to NoSQL database, then rendered the data in a web application created with Flask. [GitHub Link](#)
- **CRISPR-CAS9 screens and CloneTracer NGS data analysis** Generated basic pipeline and executed to analyse and visualize high-throughput data with R language in R studio platform. [GitHub Link](#)

## Professional Experience

Moffitt Cancer Center, Tampa, Florida – Postdoctoral fellow 2020-present  
 Developing a project using genetic and epigenetic high-throughput screening approaches and transcriptomic data analysis to understand drug resistance mechanisms in lung cancer.

## Certificates

- **Erdos Data Science** issued by Erdos Institute, December 2022. No Expiration Date.
- **Rutgers Data Science and Visualization** issued by Rutgers University, December 2022. No Expiration Date.
- **Genomic Data Analysis** issued by Moffitt Cancer Center, November 2022. No Expiration Date.
- **Data science: R Basics** issued by HarvardX, May 2022. No Expiration Date.
- **R programming for cancer research** issued by Moffitt Cancer Center, July 2022. No Expiration Date.
- **Biostatistics for cancer reseaech** issued by Moffitt Cancer Center, April 2020. No Expiration Date.

## Education

<b>Data Science Bootcamp</b> Rutgers University and Erdos Institute, respectively, online programs	May-Nov2022
<b>PhD, Molecular Oncology</b> European Institute of Oncology, Milan, Italy	2014-2019
<b>MSc, Molecular Diagnostics and Biotechnology</b> University of Camerino, Marche, Italy	2011-2013

# COVER LETTER

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## Do you need one?

Check the job listing. Does it state that a cover letter is required, optional, or not desired? If it is optional, use it as an opportunity to submit one. By doing so, it displays that you are taking the opportunity seriously and that you are willing to put in the additional effort.

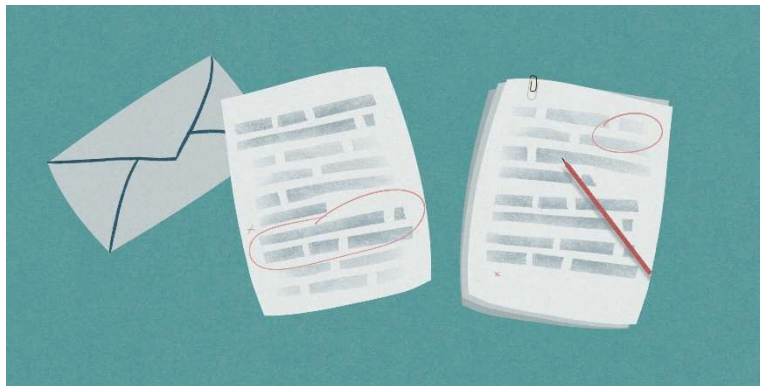
Consider it a chance to display your communications skills, show your personality, and clarify any gaps that you may have within your resume. A cover letter will not hurt your chances when submitting one, unless it is specifically outlined that you should not submit one alongside your resume.

## Tips

- Should be clear and concise.
- Should be kept to one page in length.
- Research the organization first. Find opportunities to convey your understanding of the organization and attempt to match the tone most often used by the company.
- Tailor the cover letter to the organization, don't leave it generic.
- The resume emphasizes past experiences, use the cover letter to focus on the future.
- If possible, attempt to meet or connect with the hiring manager beforehand to either ask a question or have a brief discussion. You can then reference that discussion in the cover letter to better personalize the document and build upon the rapport that was established.
- Create a strong opening statement.
- Convey your enthusiasm for the position.
- Emphasize the value that you bring. Share an accomplishment that depicts your ability to address challenges the company may be facing.
- Proofread prior to submitting.

## Don't

- Try to be funny or unprofessional.
- Send a generic cover letter.
- Excessively attempt to use flattery.







# YOUR NAME

Phone | Email | Location (City, State, ZIP)  
Online Portfolio/Professional Website (Optional)

*\*This should mirror the contact information in your resume. A cover letter and resume are part of the same package of application materials—they should complement each other.*

[Date]

[Name of employer]

[Mailing address of employer]

Dear [Hiring manager's name],

[Greet the hiring manager and state your name as well as the position you're applying for. These second and third sentences can mention how you found the position and express enthusiasm for the job. You can also mention if you heard about the position from a friend or if a colleague referred you.]

[This first sentence in your second paragraph can introduce the skills you've gained from educational courses, volunteer experience or extracurricular activities. You can feature examples of these specific skills and tie together how you can apply them to this job position during these next few sentences. Mention any other related achievements or awards and how they may benefit the company.]

[Your next paragraph can explain why you're the best candidate for the role. Mention any details you noticed on their website that you believe reflect your passion or motivations. You can also explain your dedication to learning more about the role and your willingness to develop new skills in the position.]

[In your closing paragraph, explain your excitement for the role one last time. Thank the employer for their time and request an interview. Mention that you look forward to hearing from them soon.]

Sincerely,

[Your name]

[Your signature]



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# 4 | Networking

# SECTION 4: NETWORKING



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## ADVERTISED OPENINGS

Most job seekers start their job search by searching for and applying to advertised openings because it is the most straightforward. Looking at advertised, posted jobs is an excellent way to learn about duties or qualifications for jobs that interest you.

Applying for advertised jobs usually involves following the application guidance included in the posting, so the process is relatively straightforward.

However, here are a couple of things to consider when applying to an advertised position:

- Expect increased competition, especially for highly desired positions. The simpler it is to find and apply for a position, the more applicants there will be for that position.
- Expect the employer to use an Applicant Tracking System (ATS).

## WHAT IS AN ATS?

An ATS is a software program that tracks job applicants. Most larger businesses now use an ATS to screen applications and resumes before a human sees them. This ensures that hiring managers or Human Resources only spend time reviewing applicants who are most qualified for the position.

An ATS feature can filter for keywords and phrases from the job posting to locate resumes and applications that meet the stated job requirements.

Because of this process, using exact language from a job posting in your resume or application is essential to the application process.



### ***Did you know...***

*Between 60% & 80% of successful job seekers get hired from unadvertised employment opportunities through networking.*



## UNADVERTISED OPENINGS

Companies fill many vacant positions without posting an opening.

Typically, employees find out about a job opening at their company. If they know someone in their network is looking for a job, they pass that information on to their contact. They may also inform their employer that they know a candidate for the open position.

In this way, job seekers gain direct access to hiring managers because of a direct network contact.

Advantages for a job seeker to pursue unadvertised vacancies include less competition, an increased likelihood that your resume will be read, and higher chance of being interviewed.

Knowing that most jobs are filled through unadvertised job openings is a game changer for many job seekers. This is why you network – because employers network.

There are several ways you can find unadvertised vacancies.

- Notify your personal, social, and professional network that you are looking for a job.
- Send a targeted resume to an individual employer contact.
- Apply directly to a company that interests you for potential vacancies even if the company has no posted openings.

## TALENT HIRE

You may be able to influence a hiring decision-maker even if they are not looking to fill an open position. You can do this by submitting a cover letter and resume that shows you have a significant talent and/or value that you will add to the business.

Job seekers use this approach when:

- They are aware of how to use their knowledge and skills to contribute to the business.
- Advertised and unadvertised job vacancies do not meet their career goals.





## SO WHAT IS NETWORKING?

**Networking can be any activity that connects you with others.**

- Searching LinkedIn for past connections or people you would like to meet
- Reaching out to people you already know
- Reaching out to people you don't know (cold message)
- Attending a job fair or networking event
- Having chats, phone calls, or virtual meetings with relevant people
- Describing what you are looking for with friends, family, acquaintances
- Following up on past connections

## NETWORK CONTACTS

Every single person that you know, meet, and interact with is a member of your network. People play various roles in your network by providing access to different information, resources, or connection opportunities. But it is important to remember that networking is a mutually beneficial process. You never know when your skills and resources can prove to be beneficial to others in your network.

### **Quick Facts:**

- Networking is not the same as asking for a job.
- Helps you learn inside information about jobs.
- Helpful for professional development.
- An employer not hiring today could be looking for someone like you for tomorrow.

**MAXIMIZE YOUR  
RESOURCES**

### **Before you start:**

- Understand what kind(s) of job you are looking for.
- Understand what skills/experience has prepared you for this role.
- Identify the target industry / companies you are most interested in.
- Narrow down the geographic area you are most interested in working in.





# COORDINATE INFORMATIONAL INTERVIEWS



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## What is it?

- A casual conversation with someone within the industry
- NOT a formal interview with a company for an open role
- Typically no more than 15-30 minutes
- Prepare questions in advance

## How can I leverage them?

- Learn more about the company (role, challenges, industry)
- Gain valuable insight (advice on areas that are desired on a resume or communicated within an interview)
- Grow your network

## HAVE AN ELEVATOR SPEECH PREPARED

It is an easy way to communicate the value that you bring and your areas of interest.

### Example:

Hi, my name is \_\_\_\_\_.

I am looking for (type of job) in (industry or field).

I really enjoy \_\_\_\_\_.

I am proficient in (job skills).

Would you mind if we could set up a time to be able to speak next week?

### 1 Start by introducing yourself

“Hi, my name is Sara.  
It’s so nice to meet you!”

### 2 Provide a summary of what you do

“I’m a PR manager, specializing in overseeing successful initiative launches from beginning to end.”

### 3 Explain what you want

“I find the work your PR team does to be innovating and refreshing — I’d love the opportunity to put my expertise to work for your company.”

### 4 Finish with a call to action

“Would you mind if I set up a quick call next week for us to talk about any upcoming opportunities on your team?”

## Quick Tips

- Take your time. A professional introduction is a quick conversation by nature. Keep it short but try not to speak too fast. Be sure to speak slowly enough for the listener to understand.
- Rehearse. Memorize a general outline or key points to keep the introduction conversational without sounding too robotic in your delivery. Avoid niche words and phrases. Using acronyms can confuse or alienate your audience.
- Express confidence. Even the best professional introduction can lose its effectiveness if your delivery lacks confidence.



## ACTIVITY: DRAFT YOUR PROFESSIONAL INTRODUCTION STATEMENT

**STEP 1.** Introduce Yourself

**STEP 2.** Give a brief summary of your background. Include what you do or what you did.

**STEP 3.** Explain what you want.

**STEP 4.** Finish with a call to action.

**Draft Your Completed Professional Introduction Statement.**



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# LinkedIn

**LinkedIn is a social media platform that allows you to grow your professional network, provide current industry information, and find job openings.**

Guidelines:

- Add a professional profile picture.
- Update your byline.
- About section: What excites you? List the skills you contain or areas you are interested in further developing. Describe the experience that you have.
- Outline your experience, education, accomplishments, and awards.
- Provide the link to any relevant publications.
- Connect with others and expand your network.



**LinkedIn (<https://linkedin.com>) or LinkedIn Premium (<https://premium.linkedin.com/>)**

LinkedIn is the world's largest professional online network and is an effective way to reach people both inside and outside your existing networking circles, background, and industry. According to LinkedIn data in 2018, 70% of jobseekers were hired at a company where they had a connection, which means you are four times more likely to get hired at a company where you know someone.

A basic LinkedIn account is free. The Premium Career subscription includes one year of access to LinkedIn Learning, which is an online educational platform that helps you discover and develop business, technology-related, and creative skills through more than 5,000 expert-led courses. You can also choose to add these courses and related skills to your LinkedIn profile once you complete them.

## Networking with Erdős

### **i2i Seminars and i2e seminar talks**

- Ask questions
- Engage with partner companies

### **LinkedIn**

- Job Boards
- 2<sup>nd</sup> or 3<sup>rd</sup> degree connections

### **New connections to help grow your network**

- See and discuss what other participants are doing
- Communicate with Erdős team members and alumni



## SENDING A COLD MESSAGE

A cold message is sent to someone who doesn't know you and isn't expecting to receive communication from you. Messages such as this can be sent through various means such as email, LinkedIn, Facebook, etc.

Tips:

- Research the organization / individual before sending the message
- Be clear and concise
- Personalize the message
- Ensure your LinkedIn profile is up to date and complete
- Provide a catchy / professional subject line
- Include introduction and how you can add value to the company
- Make a list of organizations you are interested in working for in order to outline the companies you would like to target
- Include a call to action (ex: meet/connect, check profile, informational interview, etc.)
- Thank them for their time or accepting your request

### Example 1:

Hello (insert name),

I saw your profile while looking up (industry name) recruiters on LinkedIn in (organization).

I am a (job title / student type), (add relevant information about your experience).

My main skills encompass (include here).

Would that be a good fit for the position you currently have an opening for?

I would love to work for (insert name) as their values and mission align with mine.

Please let me know what you think and if you would have any time available to discuss further.

### Example 2:

Hi (Insert name),

I saw your profile while searching on LinkedIn for data science positions here in the local area. I am interested in transitioning to industry as I wrap up the final year of my PhD in (insert here). I am proficient in Java and Python and have experience with (insert here). Would that be a good fit for the type of role you are currently recruiting for? If you think I could be a good fit, I would love the opportunity to speak with you further. If so, would you be available within the next two weeks so that we may have an opportunity to meet? Thank you in advance for the consideration and any assistance you may be able to provide.



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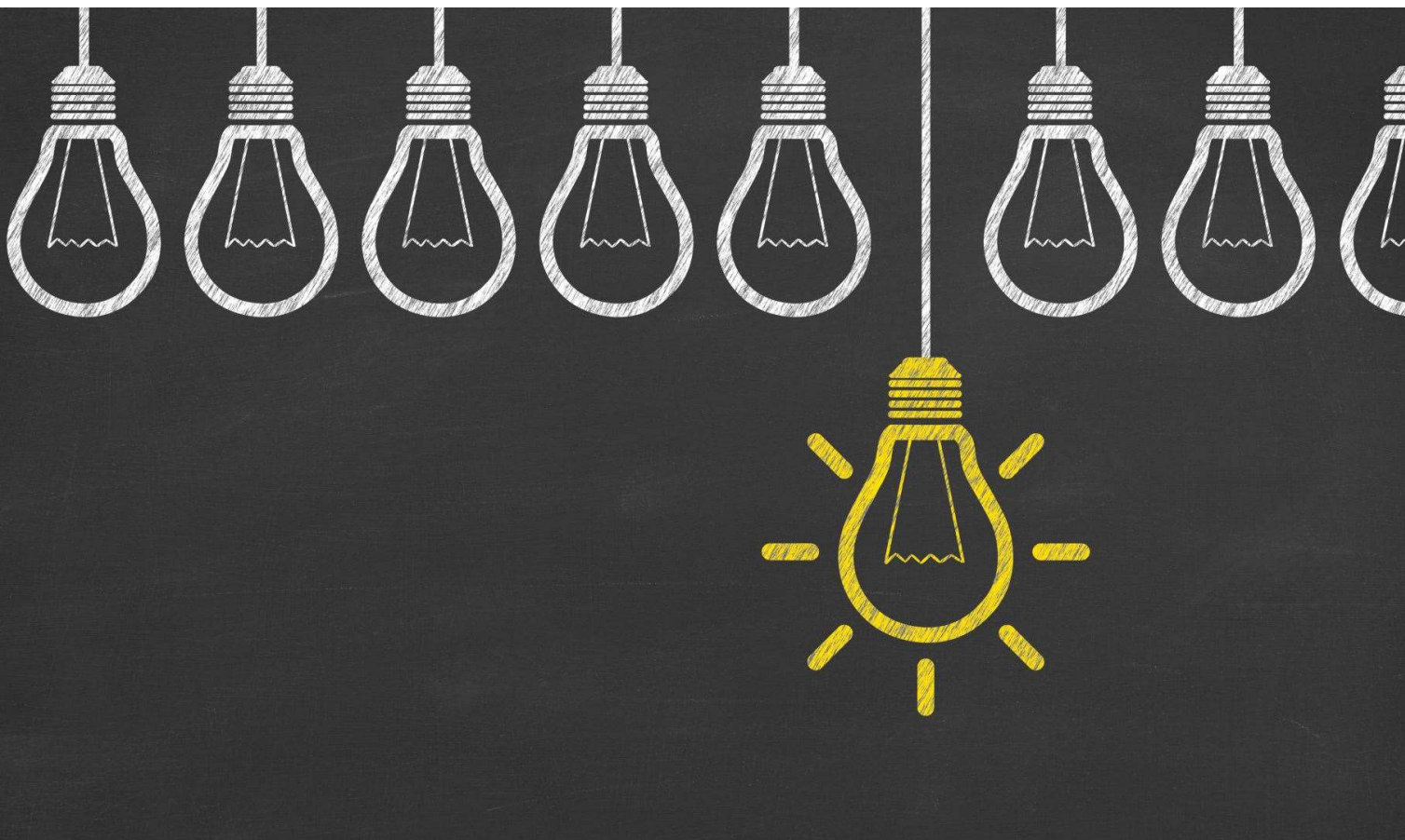
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# 5 | Finding The Job



# SECTION 5: FINDING THE JOB



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In this section, we will move from networking and unadvertised positions to discussing advertised positions; where to look for a job; and what keywords might be important to an employer.

## WHAT IS A JOB BOARD?

A job board is a website used by employers to advertise their job vacancies to job seekers. Job seekers can use job boards to search for new job opportunities in their area and profession.

Job boards are most often free for job seekers.

Usually, online job boards allow recruiters to use some features without charge, offering options for free job postings or trials. Because job boards provide the easiest way to find and apply for jobs, it is important to note that this method also increased the competition for any given position.

Four common job board sites include Indeed, CareerBuilder, ZipRecruiter, and the National Labor Exchange (NLX). These job boards post positions in all industries.

You can also find the Erdős job board tab located within your respective profile.



## ACTIVITY: USING THE Erdős JOB BOARD



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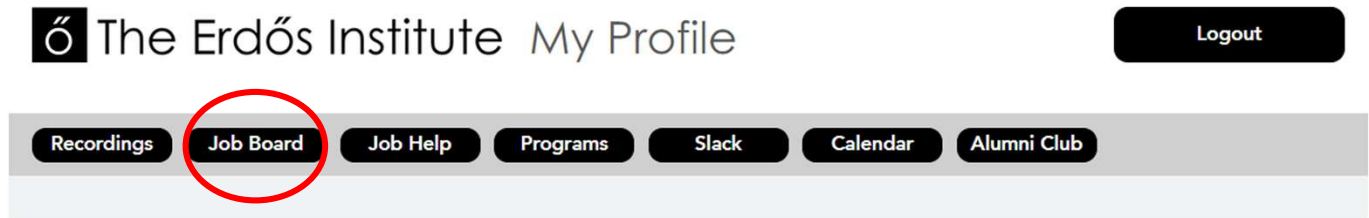
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**STEP 1.** Log on to your Erdős Profile and select the “Job Board” tab. .



**STEP 2.** Filter depicted positions by Companies you are interested in.

### Job Board

Current job openings we are looking to fill

Filter by Company

Select Company

	Location	Department	Job Type	Created Date
STR	Arlington, VA	Sensors	Full-time	01/31/2024
STR	Arlington, VA; Woburn, MA	Sensors	Full-time	01/31/2024
STR	Arlington, VA; Woburn, MA	Analytics	Full-Time	01/31/2024
STR	Arlington, VA	Sensors	Full-time	01/31/2024
STR	Arlington, VA; Dayton, OH; Woburn, MA	Systems Development	Full-time	01/31/2024
STR	Dayton, OH; Woburn, MA	Sensors	Full-time	01/31/2024
Graphistry	Remote	100x Investigations	Full-time	01/30/2024
Regrid	Remote	Processing	Full-time	01/30/2024

**STEP 3.** Click on a job opening you are interested in to review additional details and to have the opportunity to submit your resume if desired. We recommend that you provide your career advisor with an opportunity to review your resume before submitting them to organizations.



STR

Senior Data Scientist

Arlington, VA; Woburn, MA

Application Form: You have not yet applied to this position.

Name:  Email:

Cover Statement/Mini-Bio:  
Who you are and what you are seeking

Choose a resume:  
 Use resume in my profile OR

Available Start Date:  Current Location:

Note: This position requires US Citizenship.

Current Visa/US Citizen:  Highest Level Active Security Clearance:

Are you a Dual Citizen?  If Dual Citizen, then what other countries are you a citizen of?



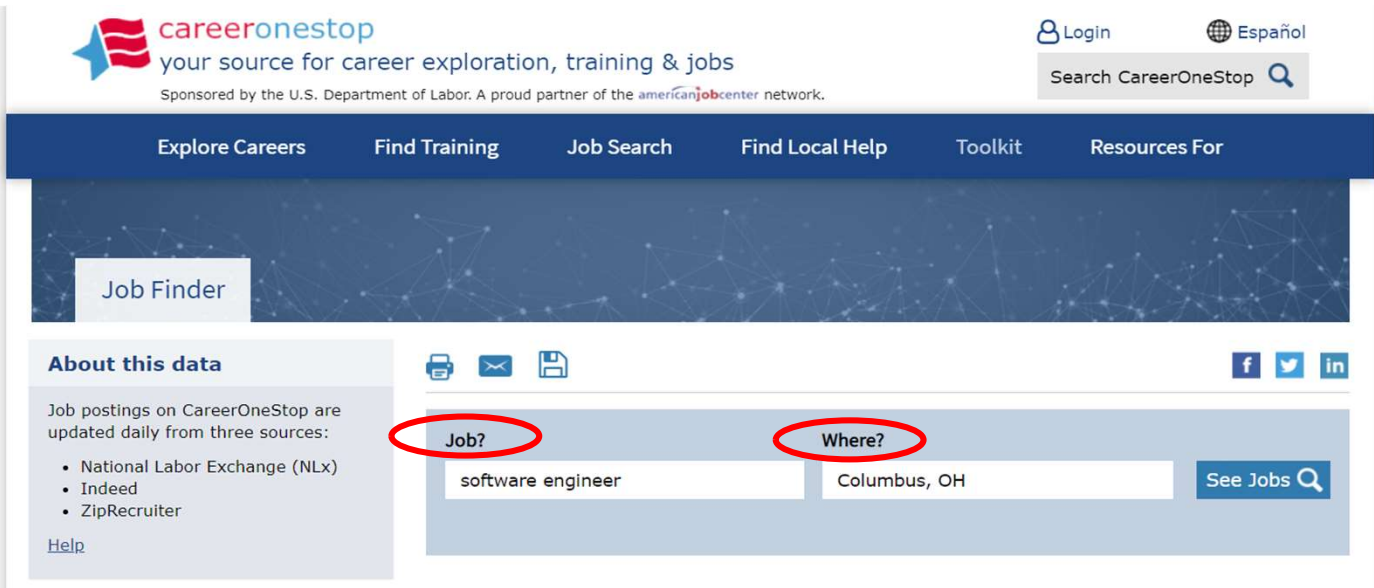
# ACTIVITY: USING CAREERONESTOP

**STEP 1.** Access CareerOneStop, <https://www.careeronestop.org/>

Select the Toolkit tab and then Jobs > Job Finder tab.

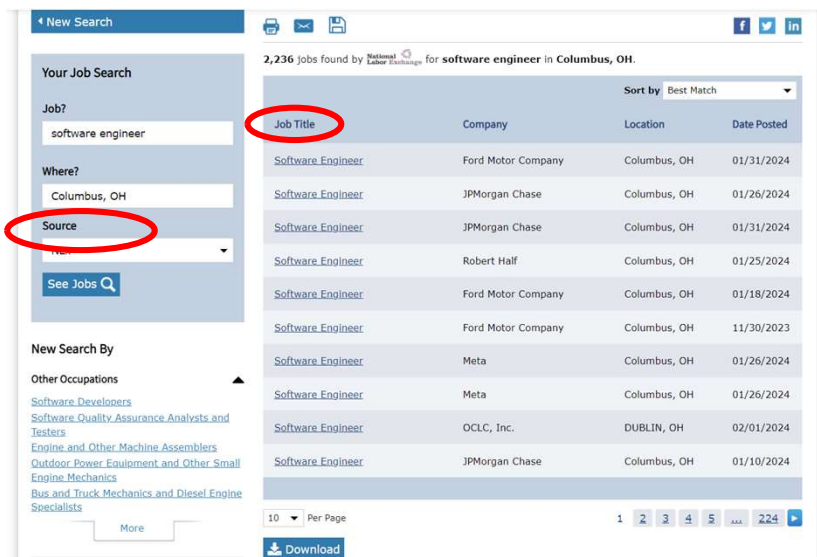


**STEP 2.** Enter desired job role and geographic location. Select "See Jobs" to begin your search.



**STEP 2.** Filter by source (i.e.-NLX, Indeed, ZipRecruiter).

Review listed jobs.



- ▶
- ▶
- ▶
- ▶
- ▶
- ▶



# ANALYZE A JOB POSTING

Now that you found the perfect job using one a job board, take time to consider all elements of the advertisement and analyze the job posting.

## WHAT DOES IT MEAN TO ANALYZE A JOB POSTING?

The job posting is essentially the employer's description of what they are looking for in a potential employee. Carefully reviewing job postings can provide terms and phrases and even skills to include in your master resume.

Job postings are typically broken into several sections and usually include:

1. Information about the company or organization's culture
2. Job location
3. Overview of the position
4. Qualifications that are required or preferred
5. Directions on how to apply
6. Keywords and phrases
7. Common job duties or responsibilities

Job descriptions, duties, and qualifications all contain keywords and phrases. If the company uses an ATS, these keywords are words or phrases chosen by the employer to identify competencies for a specific position. These job-related words can identify qualified candidates based on education, skills, experience, and the industry or position.

### Here are 10 examples:

- |                          |                       |
|--------------------------|-----------------------|
| 1. Quantitative Research | 6. Research design    |
| 2. Machine learning      | 7. Python             |
| 3. Leadership skills     | 8. R                  |
| 4. Teamwork              | 9. MATLAB             |
| 5. Javascript            | 10. Linear Regression |

### Quick Tip

*Identify the key skills and experiences that are requested in the posting and emphasize the ways in which your background aligns with those requirements within your resume*





## ANALYZE THE JOB POSTING

Analyzing the job posting will assist you in making a connection between your skills and the employer's requirements. Analyzing the job posting will help you write new P.A.R. statements. Items that you should consider include:

Technology Skills

Abilities

Education requirements

Communication Skills

Work Schedule

Prior Work Experience

Technical Qualifications

Knowledge

Company Culture

Ask the following questions as you review a job posting to identify keywords and phrases.

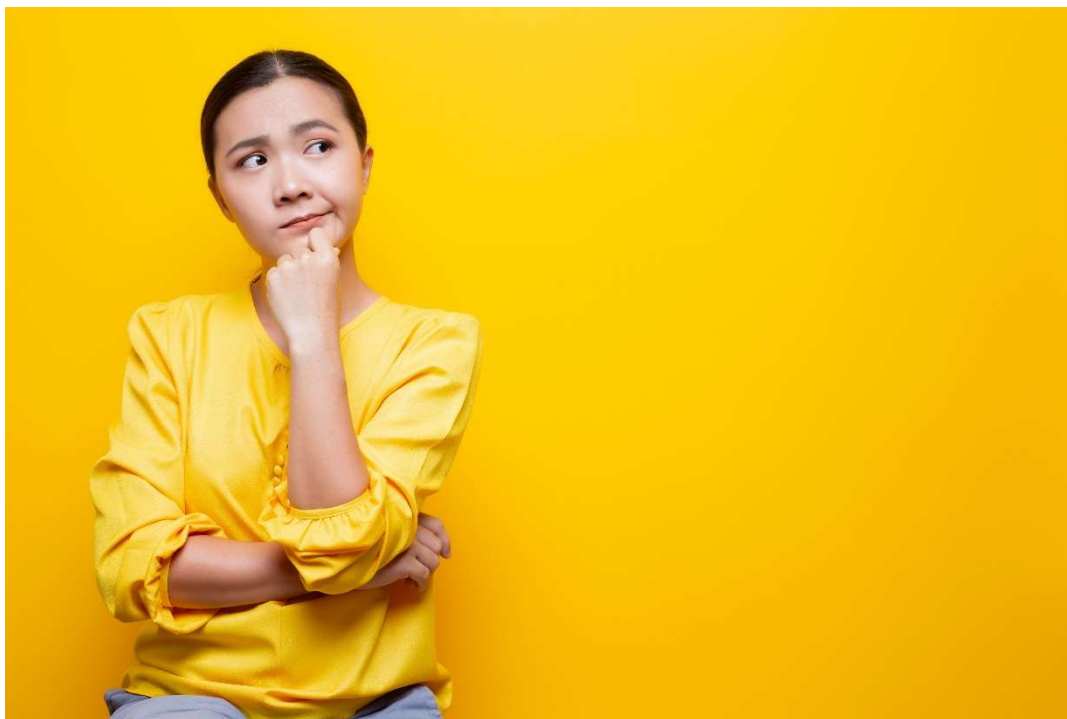
- What is the job title?
- What are the duties and responsibilities of this position?
- What are the industry-specific words or terms?
- What hard skills are mentioned?
- What soft skills are mentioned?
- What are the position requirements?
- What are the added preferences?
- Does the employer describe the ideal candidate for this position?
- What are the most important things the employer is seeking?
- What keywords could be used in P.A.R. statements?





## Eight Tips for Completing a Job Application

1. Read and follow application instructions carefully. Complete each field as requested. For hard copy applications, complete the application as neatly as possible.
2. Keep your application consistent with your resume. Tailor your answers to the job you are seeking. Do not provide negative information but answer the questions truthfully. Copy and paste from your resume where applicable.
3. You may be required to submit your resume and cover letter with your application. Make sure your resume and cover letter are targeted to the position you are applying to.
4. Consistently save your information when completing an online application to protect your data. Organizations may build a time-out feature into their online application system. Anything that is not saved before the system times out may be lost.
5. Do not leave blank spaces. Employers may be required to have a complete application. If there are questions that do not apply to you, respond with “N/A” or “not applicable.” Never write “see resume” on the application, as this may imply that you are disinterested in the position.
6. Do your salary research. Employers may have you list your salary requirements, and your answer could be a deal breaker. It is okay to say “open” or “negotiable.” If those are not options, provide a salary range based on your research for the position and company.
7. Be prepared to provide references. If an application requests references, provide accurate contact information.
8. Proofread your application before submitting it. Have someone else proofread your application to ensure that there are no typos, misspellings, or grammar errors.





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# 6 | Interviewing and Job Offers

# SECTION 6: INTERVIEWING & JOB OFFERS



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## INTERVIEWING

Interviews can be the most important part of the employment process. It is your opportunity to truly market yourself to a prospective employer.

With proper preparation and a good understanding of what to expect, you should be able to present yourself to a prospective employer as a strong candidate who will bring value to the organization.

We covered the various aspects of finding a job and how to apply to help you land that interview.

Now we will go over interview methods and types of interviews as well as three types of interview questions you may encounter. Using the STAR method in your interview answers will also be covered.

### **Recall Prior Interview Experience**

You already have interviewing experience. Think about previous interview experiences you have had. This could include anything from an academic experiences to a summer job. You may have conducted interviews in your current or a previous position. You may have been the candidate.

Interviewing techniques have evolved somewhat over the past several year to include more virtual interviews. Let's discuss some popular methods and types of interviews.

# TECHNICAL VS BEHAVIORAL INTERVIEWS

## TECHNICAL INTERVIEWS

A technical interview assesses an individual's ability to think creatively and find solutions to technical problems. Success in a technical interview signifies your ability to meet the job requirements. Interviewers are typically interested in the methodology used for solving problems.

In a technical interview, it is common for interviewers to present brain teasers, numerical reasoning problems, or technical assessment problems. This can be done over the phone, through a video call, or in person.

Formats:

- Demo Projects
- White Boarding
- Data Challenges
- Paired Coding
- Case Studies

## BEHAVIORAL INTERVIEWS

Behavioral interview questions are designed to assess your character traits, abilities, and skills by asking about how you handled different workplace situations. Through your responses, interviewers gain insight into how you are likely to respond if faced with a similar scenario in the future.

Behavioral interview questions unveil the details of a candidate's universal core skills and individual qualities that will be relevant in the position. They can revolve around interpersonal matters, leadership attributes, or how a person reacts under pressure.

Sample questions:

- Tell me about yourself.
- Tell me about a complex problem you have had to solve at work before and how you approached finding a solution.
- How do you deal with difficult clients or co-workers?
- Can you share an example of when you failed at something and what you learned from it?

### How to Prepare for Tech Interviews

- Erdős Tech Interview Workshops
- Mock Interviews
- Self Study
- Research of description/company
- Practice solving tech problems
- Review fundamentals



### How to Prepare for Behavioral Interviews

- Erdős Behavioral Interview Workshops
- Mock Interviews
- Rehearse
- Research of description/company
- Prepare elevator pitch
- STAR method



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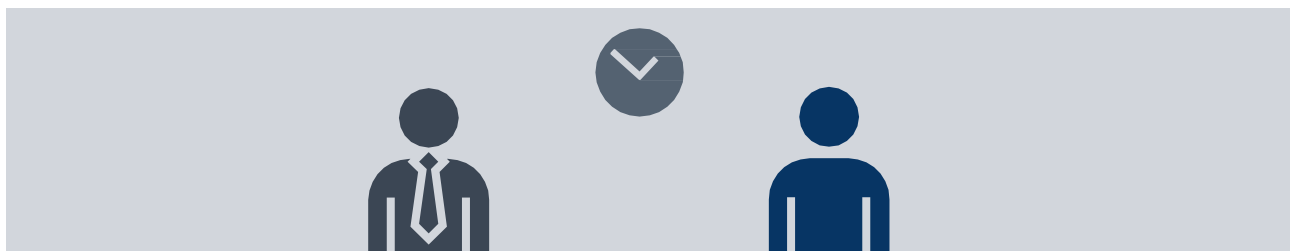
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## TYPES OF INTERVIEWS

Whether the interview is in person, on the phone or via the Internet, companies use the following types of interviews:

- One-to-one or Traditional
- Group
- Panel
- Meal
- Demonstration or Working
- Stress
- On-the-Spot or Career Fair



### One-to-one or Traditional Interview

With this method, you will meet with one person at a time. The interviewer may be the person who will be your supervisor or manager. Traditionally, this is the most common type of interview.



### Group Interview

This method brings in many applicants at once and can be more of a presentation about the company. You may be called for a face-to-face or panel interview after the group session.



### Panel Interview

This type of interview involves two or more interviewers sitting on a panel or committee. These interviewers may include HR staff, the hiring manager, and/or the supervisor. This type of interview involves answering the questions posed by multiple people. It adopts a similar style to a promotion board.





### Meal Interview

Whether breakfast, lunch, or dinner, these interviews are designed to observe you outside of the formal work environment. Due to the casual environment, it is easy to get comfortable, so be sure to maintain your professionalism.



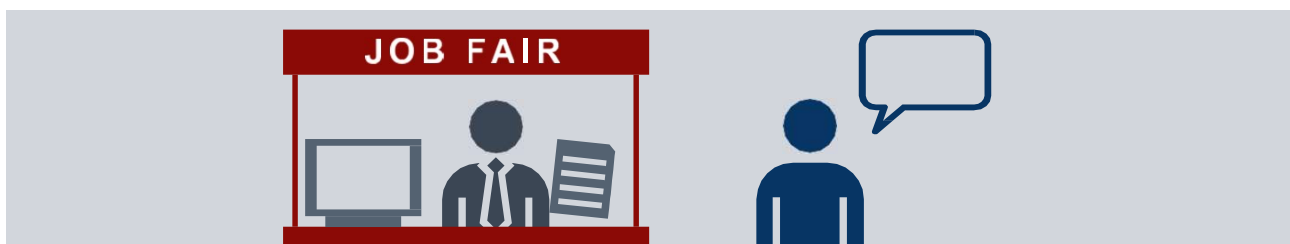
### Demonstration or Working Interview

A demo or working interview usually combines interview questions and a demonstration of skills and knowledge. For example, for a teaching position, you may be asked to submit a two-minute demonstration video of a mock lesson, or the interviewer may role play as a student. A software engineer may be asked to build an app from scratch and explain their approach and design.



### Stress Interview

During this type of interview, the interviewer creates a situation as problematic as possible for you, the candidate, to test your capacity to think on your feet while remaining calm. Questions asked may be very direct and unexpected. The interviewer may ask questions that are not relevant or may seem uninterested in your answers. Don't get intimidated or offended. You have a unique opportunity to demonstrate your skills. Some industries and organizations that use stress interviews are medical professionals, management and consulting firms, law enforcement, and airlines.



### On-the-Spot or Career Fair Interview

On-the-Spot or Career Fair Interviews are unscheduled interviews with the potential employer. Often, these take place during seminars or career fairs where many candidates are seeking employment. In this situation, the potential candidate asks the employers questions about their company and possible positions which can elicit an on-the-spot interview.



## INTERVIEWING TIPS

For all interview types, here are seven basic tips to remember:

1. Research the company and your interviewer.
2. Re-read the job description.
3. Review your resume and practice your responses to common interview questions.
4. Have questions prepared to ask and be prepared to take notes.
5. Plan and ensure that your clothing is clean and pressed the day before.
6. Practice proper body language.
7. Be prepared to share examples of your work, if needed.



Most interviewers use a standard set of questions that relate to how your skills, knowledge, training, and work experience fit the job and the company. In general, employers are looking for the answers to the following three questions:

1. Does the candidate have the skills and abilities required to perform the job?
2. Does the candidate possess the attitude and work ethic the employer expects?
3. Will the candidate be a team player and fit into the organization?

## TYPES OF INTERVIEW QUESTIONS

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### TRADITIONAL INTERVIEW QUESTIONS

Here are common traditional interview questions along with what they want to know (the meaning), how you can respond (answer), and an example response.

#### Question:

Tell me about yourself.



**Meaning:** What value can you bring to the organization?

**Answer:** Start off with your work experience and highlight two to three relevant skills. Wrap up your answer by talking about how your prior experience has prepared you for this position. Keep it short — two minutes or less!

**Question:**

Why should we hire you?



**Meaning:** How are you the best candidate for the job?

**Answer:** Make sure you explain how you meet the required qualifications for the job.

**Question:**

Why do you want this job?



**Meaning:** What do you know about the job and the company?

**Answer:** Be specific about what makes you a good fit for this role and mention aspects of the company and position that appeal to you the most.

## BEHAVIORAL INTERVIEW QUESTIONS

Behavioral questions request descriptions about how you have behaved in past situations, and your answers are predictors of how you might behave on the job. Review the following examples:

- Tell me about a time when you had to implement a major project.
- Have you had to convince a team to work on a project that the team members were opposed to? How did you handle that situation?
- Have you ever encountered conflict with a coworker? How did you overcome that conflict?

## SITUATIONAL INTERVIEW QUESTIONS

Situational questions present you with a potential scenario to gauge your skills (problem solving, conflict resolution, etc.) or your personality (integrity, mindfulness, etc.). Review the following two examples:

- If you were busy meeting a deadline and a coworker asked you to help make copies, what would you say?
- If one of your supervisors tells you falsify information, what would you do?

### Quick Tip

*You can improve your chances for success if you practice answering questions using the STAR Method— Situation Task, Action, Result—as much as possible.*



# STAR METHOD FOR INTERVIEW QUESTIONS

The STAR Method is an excellent method for developing responses to behavioral and situational interview questions.

Here is an example of how you can use the STAR Method to plan your answer to the following interview question: "Provide an example of a goal you reached and tell me how you achieved it."



## CONSIDERATIONS

### **In-Person**

- Arrive a few minutes early
- Have a copy of your resume
- Dress professionally
- Remain engaged
- Make eye contact
- Take notes

### **Video Conference**

- Test your technology beforehand
- Dress professionally
- Be mindful of the background and camera angle
- Be mindful of where you are looking if you have multiple screens
- Remove distractions

### **Phone Call**

- Know who it is that will be calling you
- Take your time
- Remember that non-verbal cues will not be visible / Communicate appropriately
- Take notes

### **Follow-Up Etiquette**

- Send a thank you note / email
- Follow up on the next steps that were discussed
- Connect via LinkedIn if appropriate
- Maintain communication

## FOLLOW-UP NOTE EXAMPLE

Dear \_\_\_\_\_,

Thank you so much for the wealth of information you provided me about the [name of role] role and [the organization] during our discussions.

It was fascinating to hear your personal passion for \_\_\_\_\_ as well as the partnerships you've fostered along the way. It is clear that \_\_\_\_\_ has a great working culture, and I am very interested in the role and the work that you/the company are doing.

Please let me know about next steps. I look forward to hearing from you soon, and thank you again for your time and consideration.

Best regards,  
[Your Name]

# INTERVIEW CHECKLIST

- Review your resume side-by-side with the job posting**
  - Write down the job qualifications and list out your experiences dealing with the required skills/responsibilities below each qualification
- Explore the company website**
  - Visit their “About Us” section
  - Learn what their mission and values are
  - Find out what development opportunities and perks are available for employees (mentorship, in-house training, lunch & learns, etc.)
  - Understand exactly what services and solutions they provide
  - Identify the types of clients they serve
  - If they have a company blog, get a sense of the types of content they are producing.
    - What kind of advice do they give?
    - Which business practices and technologies do they support?
- If they don't have a “News” section on their website, search the company on Google and filter results by “News”**
  - Comb through articles and reports involving:
    - Recent business developments, innovations, products, etc.
    - Culture and leadership
    - Industry trends
- Be prepared to answer the following prompts:**
  - Tell me about yourself.
  - Walk me through your resume.
  - Why Data Science?
  - Why [x company]?
  - Why [x industry]?
  - Tell me about a data science project you've been involved in.
- Search Glassdoor for past interview questions entered by people who have applied to the same position**
- Come prepared with your own questions for the interviewer to show you're engaged. Don't ask questions that you can find the answer to on their website or with a Google search.**
  - Is mentorship offered?
  - What are some of the current challenges project teams are facing?
  - Are there opportunities for advancement or professional development?
  - What is the performance review process like here? How often would I be formally reviewed?
  - What gets you most excited about the company's future?







# JOB OFFERS

Congratulations! You finished the final interview, and they offered you the job. Now, it's time to weigh your options. In this section, you will learn how to evaluate your job offer to ensure it is a good fit for you. Below is a checklist to be able to refer to in preparation for negotiating your salary.

## The Erdős Institute Salary Negotiation Checklist

- Do your Research**
  - Know your budget/expenses. What do you need to maintain your standard of living?
  - Geographic location
  - Years of industry experience
  - Years of leadership experience
  - Education level
  - Career level
  - Skills
  - Licenses / Certifications
  - Market average (National average / Geographic location average)
    - Indeed Salaries / Indeed's Salary Calculator
    - Glassdoor
    - Salary.com / Payscale.com
    - Career One Stop
- Know Your Value / Prepare Your Talking Points**
  - Write down talking points to emphasize your skills and experience
  - Provide specific examples of results you've achieved
  - Previous salary / achievements
- Bargaining Tools**
  - Vacation days
  - Work schedule or location (hybrid / remote)
  - Stock options
  - Relocation Package
    - Will you need to sell your home or break a lease early?
    - Will you be moving overseas?
    - Connection fees for utilities?
    - Airfare, rental cars, shipment of possessions?
    - Will you require storage upon arrival?
    - Will your spouse require job assistance?
    - Identify the work you may be able to accomplish if you are able to find a home quickly to use as a bargaining tool.
  - Sign on bonuses



- Rehearse**
- Demonstrate gratitude**
  - Both you and the employer have invested a lot of time and effort to get to this point
  - Remain professional and courteous
- Prepare for Possible Questions**
  - "Are we your top choice?"
  - "If we come up in salary, will you accept the position immediately?"
  - "Do you have other offers you are considering?"
- Be Prepared With Questions of Your Own (If person reacts negatively or immediately rejects offer)**
  - Remain calm and confident
  - "What is the budget of this position based upon?"
  - "What information do you need from me to make a decision?"
  - "Are there other negotiables available besides salary?"
- Know Your BATNA (Best Alternative to a Negotiated Agreement)**
  - Measure by which you will judge the proposed agreement
  - Purchasing a car example: If you are offered a used car for \$12,000, but another dealer is selling the same car for \$10,800, this is your BATNA.





## NEGOTIATION OUTCOME: COMMUNICATING YOUR DECISION

After receiving the job offer, you have the option to accept, decline, or request additional time to consider or evaluate the offer.

When requesting additional time, be sure to confirm when an answer is needed.

If the offer is made verbally, you can request a written offer. If the offer was made in writing, a written response is required. When you receive a job offer, follow the company's instructions, and meet all deadlines.

If you accept the position, ensure you thank them for the opportunity, and verify the salary, benefits, position, and starting date.

To request time to evaluate and consider the offer, start by relaying your thanks and appreciation for the job offer. Then ask what the deadline is to get back with your decision. Requesting a day or two is reasonable.

If you decide to reject the offer, communicate quickly with the employer, and express your gratitude for their time. You never know to whom they are connected. Even if the negotiation did not go the way you hoped, continue being professional and gracious.

Consider the following:

- Are you comfortable with asking for more time to consider?
- Do you understand how maintaining professionalism when responding to an offer can impact future opportunities?

Remember, this is a collaborative effort where you and the employer both want a positive outcome. Also remember that the employer offered you the job, so they want to hire you. If you are unable to find middle ground during your negotiations with your employer and you choose to decline their offer, you should walk away with confidence. Just as this employer has seen the value in your skills, experience, and education, other employers will do the same.

### SECTION SUMMARY:

Interviews are an opportunity to market yourself to a prospective employer.

You increase your chances of success when you:

- Are aware of the methods and types of interviews as well as the meaning behind interview questions.
- Use the STAR method to answer behavioral and situational interview questions.
- Evaluate a job offer.

### Quick Tip

*Whatever you decide, be sure to communicate your decision to the employer within 24 to 48 hours, either verbally or in writing.*

### Did You Know?

- According to Glassdoor, 59% of workers did not try to negotiate the salary of their current job.
- According to NPR, people who never negotiate salaries can miss additional earnings of between \$1 million and \$1.5 million in their lifetime.

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# AVAILABLE SPACE FOR NOTES

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## REFERENCES

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All websites, URLs and screen shots within this guide are active at the date of publication.





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## Employment Fundamentals Workbook

