

Introduction to Job Help

Session #1

Agenda

- **Our Team**
- **Introduction to Job Help**
 - Overview of Behavioral and Technical Job Help Program
- **Career Search and Behavioral Interview Prep**
 - Overview & Expectations
 - 1:1 Career Advising
 - Your Profile Summary - Who You Are as a Candidate
 - LinkedIn
- **Technical Interview Prep and Practice**
 - Types of “Data Roles”
 - Subject Matter
 - Interview Formats
 - How to Prepare
- **Next Steps - Assignment #1**

Job Help Team

- We are career coaches, advisors, and industry connectors who take an individualized approach to improve your ability to land a job and help you advance professionally.



Amanda Perrin
Head of Industry
Placement
Co-Founder



Roman Holowinsky
Managing Director &
Co-Founder



Suzanne Kovacs
Head of People &
Sustainability



Carolynn Pickard
Career Development
Advisor



Donnie Seidle
Head of Behavioral Interviews &
Career Development
Advisor



Jared Melendez
Career Development
Advisor



Lindsay Warrenburg
Associate Director

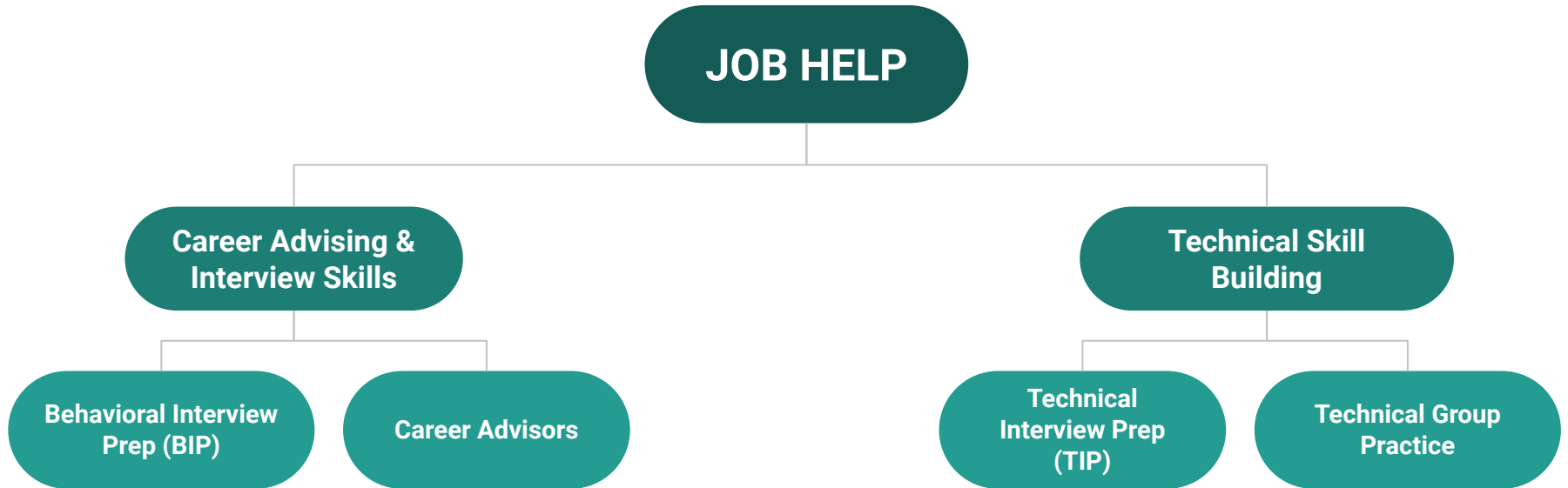


Andrew McMillan
Hedge Fund Researcher

Job Help

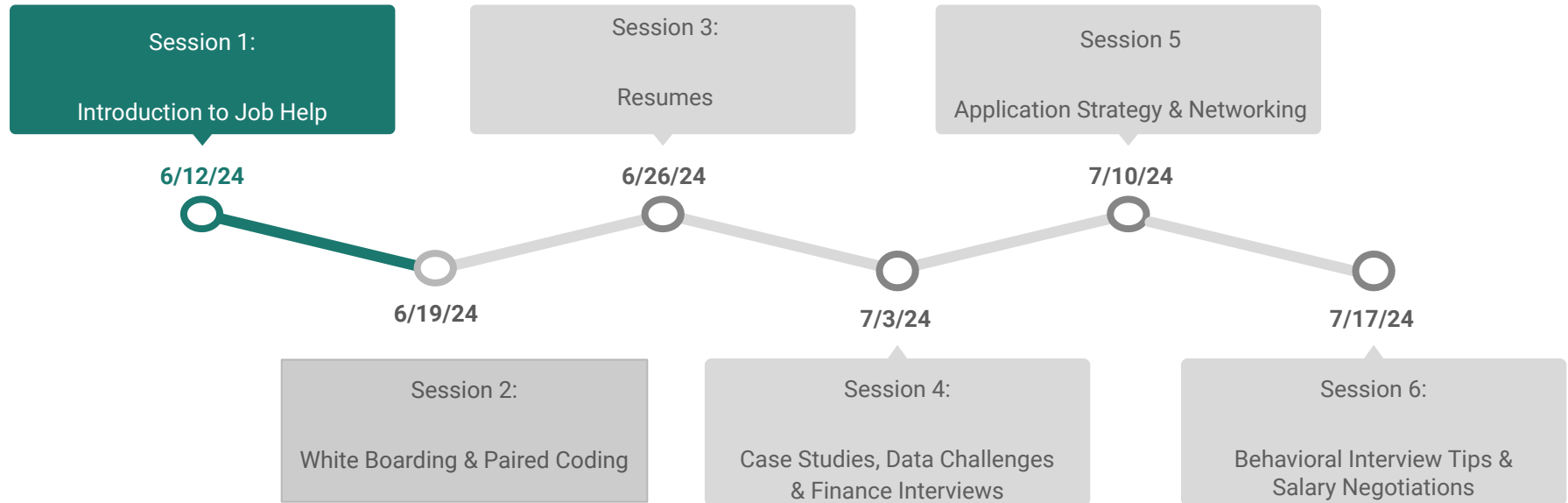
Program Schedule

Job Help Focus Areas



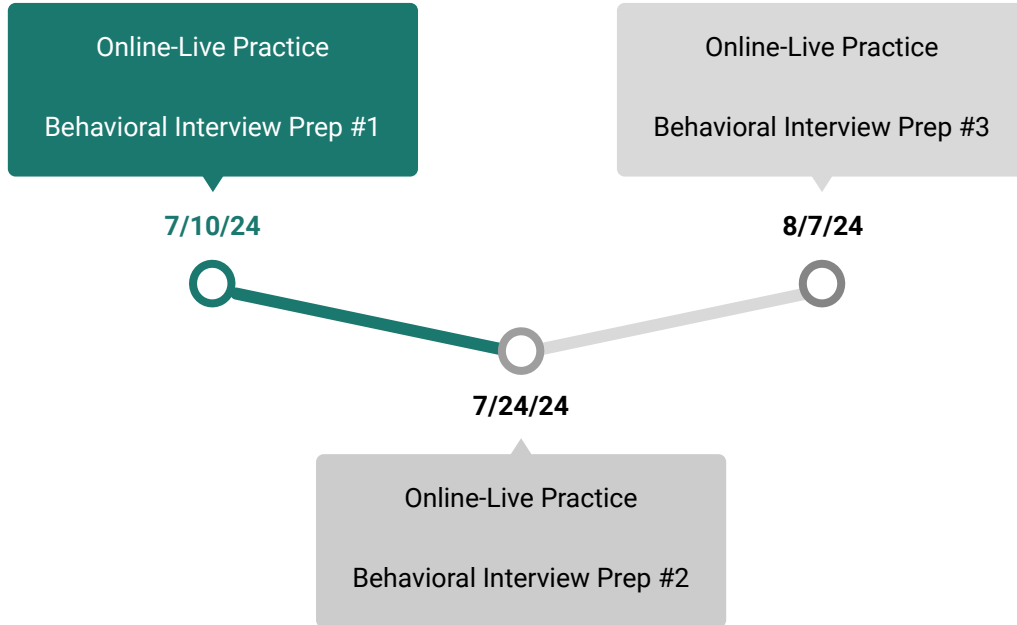
Job Help - General Sessions

Wednesdays
12-1 pm



Behavioral Interview Practice (BIP)

Wednesdays
5-6:30pm



- Participate in a mock interview
- Typical steps of the interview process
- Best practices for advancing
- Learn together through shared experience
- NOT recorded
- Attend one or more

Technical Interview Practice (TIP)

Topic	Mondays, 9-10am	Tuesdays, 12-1pm
White Boarding/Paired Coding: Probability	June 24	June 25
White Boarding/Paired Coding: Statistics	July 1	July 2
White Boarding/Paired Coding: Machine Learning	July 8	July 9
White Boarding/Paired Coding: SQL & DB	July 15	July 16
White Boarding/Paired Coding: Computer Science	July 22	July 23
Case Studies: Product & Business	July 29	July 30
Review Data Challenge #1 w/ Group	August 5	August 6
Review Data Challenge #2 w/ Group	August 12	August 13
Finance	August 19	August 20

Job Help website: <http://www.erdosinstitute.org/programs/may-summer-2024/job-help>

 The Erdős Institute My Profile

Logout

Recordings

Job Board

Job Help

Programs

Slack

Calendar

Alumni Club

Welcome to the Spring 2024 cohort!

Please register for any programs that you wish to be a part of and receive announcements for.

View Programs

Topological Data Analysis

TDA Study Group week 1

January 30, 2024 at 1:00:00 PM

EVENT

Spring 2024

Spring 2024 Orientation

February 1, 2024 at 12:00:00 PM

EVENT

Deep Learning

Deep Learning Orientation

February 2, 2024 at 12:00:00 PM

EVENT

Job Help

Start Learning about Technical Interviews

Ace the DS Interview: Introduction through Chapter 4; Erdős:
Technical Interview Materials

February 8, 2024 at 5:00:00 PM

DEADLINE

Deep Learning

Deep Learning Group Formation

This is your study group team and your project team

February 9, 2024 at 9:34:00 AM

DEADLINE

UX Research Boot Camp

Team Formation

You'll meet in these groups every week: they are your study
group AND project group

February 9, 2024 at 5:00:00 PM

DEADLINE

Career Advising - What You Can Expect

Career Advising: What You Will Gain...

- An **industry-facing resume**
- Tools and techniques to **navigate your job search**
- Identify your **target companies and positions**
- A polished “**elevator pitch**”
- Leverage and expand your **network**
- Common Interview Questions
- Industry Etiquette
- And much more...!



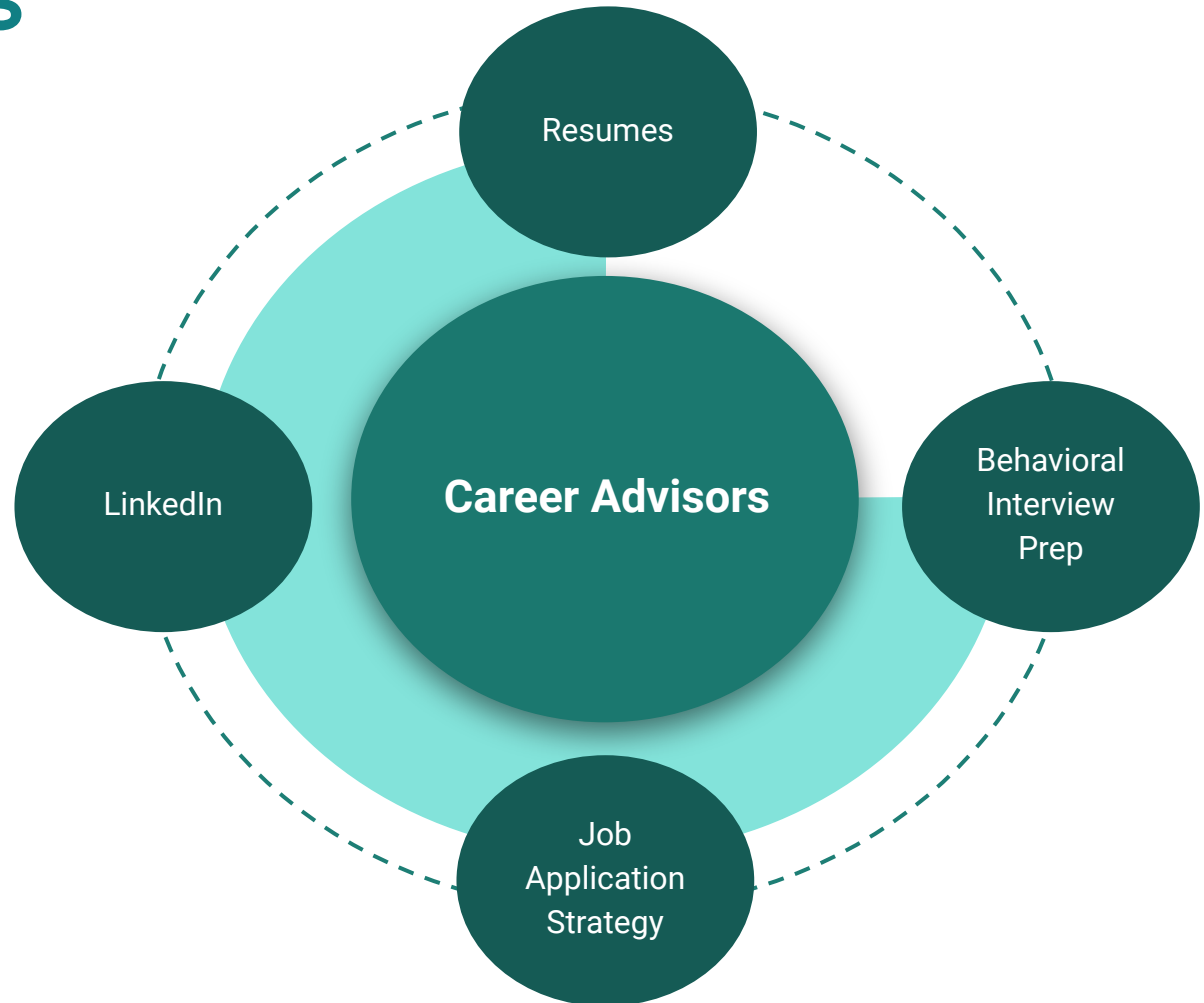
Career Advisors

Get to know your Advisor:

- Meet
- Ask questions
- Seek Feedback
- Follow up & Inform

Master the following:

1. Job Help Page
2. Erdős Resume Template
3. Employment Fundamentals Workbook



Getting Ready...

- ASSETS
 - Resume, LinkedIn, Profile Statement
- GAME PLAN
 - Identifying target companies & networking
 - Application Strategy review w/ Advisor
- PREPARE
 - Advisor
 - Behavioral Interviews
 - Technical Interviews
- TRACK
 - Log Status in Profile



Your Strategy At Each Stage

1-2 years:

- Create an Erdős Profile.
- Create a one-page Resume.
- Create a LinkedIn Profile.
- Connect with peers and alumni on LinkedIn.
- Research industries, roles, and interests.
- Complete project-based internships.
- Incorporate desirable industry-relevant skills in the Bootcamp.

6+ months:

- Refine your Resume.
- Explore opportunities at Partner Companies.
- Identify interests, target positions; are you a good fit?
- Engage with alumni and company reps through i2i.
- Get interview practice by *applying*; What were you asked and how well did you respond? (Track in progress journal.)
- Attend Erdős Behavioral & Technical workshops and study groups.

<3 months

- Apply to Partner Companies.
- Articulate why you are a good fit.
- Establish a list of jobs you are interested in.
- Refine your “elevator pitch” and your profile.
- Actively network using your profile/summary.
- Regularly check our LinkedIn & Website job boards.

LinkedIn

LinkedIn: Getting Started

- Create your own “brand”
- Your LinkedIn profile is *live*
 - Extended version of your resume, aspirations and goals
- Use for networking, job and company search, and much more!
- Visit **LinkedIn Learning** to give you a leg up!



LinkedIn: Getting Started

- Profile picture.
- Byline (e.g., PhD Candidate at [university]).
- **Profile Statement**
- Resume
- **Include Erdős Data Science Boot Camp and courses.**
- Link publications, website, GitHub
- **Connect with other members of the Erdős Institute!**



Profile Statement - Who are you...?

Highlight your Skills & Experiences

Why is this important?

- It creates your story.
- It facilitates introductions.
- This summary is an introductory sentence to use on your resume and LinkedIn that **concisely** features your skills and professional or research experience.
- This shows how you might be an asset to the position.

Example:

Jane Doe is a PhD holding _____ with _____ years of experience in a research capacity (or with research experience in _____, _____, _____, producing insights in _____, _____). She has an interest in _____ (helping companies anticipate, predict and assess investment potential, explain new and existing research, and providing recommendations and timely information to the teams she supports.)

How Recruiters Use LinkedIn

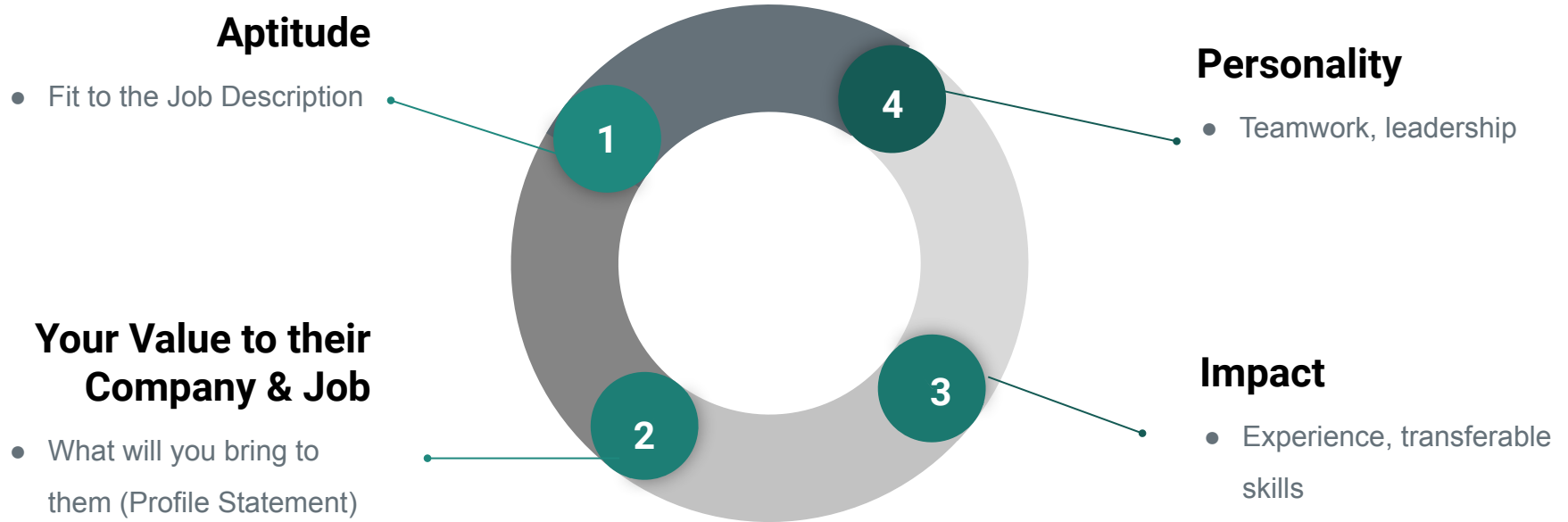
Recruiters have the ability to search for...

- Years of experience
- Years w/ company
- Years in current position
- Military veterans
- Current companies
- Past companies
- Company types
- Profile languages
- Recently joining LinkedIn
- Skills + Attributes
- “Open to Work”
- Filter by KeyWords
- Fields of Study
- Degrees
- Employment type
- Company Sizes
- Company Followers
- Job Functions
- Locations
- Open to remote work
- Graduation Years



Start off on the right track...

What Are Hiring Managers Looking For?



On-the-Market Checklist

6+ months out:

- Follow Guidance in the “**Employment Fundamentals Workbook**” (Located On the Job-Help Page)
- Create a one page **resume**, upload it to your Member Profile.
- Schedule **1:1 with a career advisor** via Calendly.
- Familiarize yourself with the corporate partners and openings
- Attend our i2i seminars to engage in conversations with alumni in companies.
- Apply to partner companies and jobs online to have low-stake interview practice.
- Track your progress through your personal progress journal and share updates with advisor.
- Practice with advisors and peers for behavioral and technical interviewing.

Less than 3 months out:

- Upload and finalize your resume.
- Apply to Partner Companies.
- Refine & Add open roles to your target list.
- Add to personal progress journal.
- Articulate “Why are you a good fit for this role”.
- Refine your “Profile” “Summary” “Elevator Pitch” and have it handy to share with us and your network.
- Regularly check our LinkedIn job board.

Next Steps:

Strategy & Assignment #1

Assignment #1: *Before we meet again for Session #3, on June 26th:*

1. Create your Profile Summary / **Mini-Bio** Statement and add to your Erdős Profile Page.
2. Develop your **LinkedIn** profile and add URL to your Erdős Profile Page.
3. Start drafting a one page **Resume** (My Profile → Job Help) and upload to your Erdős Profile Page.
 - ❑ [Resume Template and Example Resumes in Program Content Section](#)
 - ❑ [We will cover resumes in more detail in Session #3](#)
 - ❑ Once the draft is done, connect with your Erdős Career Development Advisor for Resume Review.
4. Set a meeting with your Advisor to review your Resume/LinkedIn Profile, or to answer any questions.

Resources:

- Employment Fundamentals Workbook - Job Help Page>Download.
- Job Help - Sample Resumes
 - https://drive.google.com/drive/folders/1Fh9p6uz49GBF259D_GR_A_SgIFToGqMa?usp=sharing
- Online Resume Review Tools
 - 185 Powerful Action Verbs For Your Resume: Click [HERE](#) to see the list.
 - <https://www.themuse.com/advice/185-powerful-verbs-that-will-make-your-resume-awesome>
 - What Hiring Managers Want to Know: Click [HERE](#) to watch the video.
 - <https://www.youtube.com/watch?v=RTvYvZ9VHDc&t=19s>

Technical Interview Prep and Practice

Technical Interviews

- Every company has at least one technical interview
- These interviews are like exams (same level as candidacy / qualifying exams)
- They take at least 3 months to prepare
- To be successful, you must study on your own and do group-based practice interviews

There are many types of data science

- Technical interviews are different for each type of data science position

Data Engineering	Computer Vision	Data Product
Software Engineering	Genomics & Computational Biology	Decision Science
Computer Science	Human Factors Engineering	Business Intelligence
Machine Learning Research	Speech Processing & Audio Engineering	User Experience & Customer Insights
Machine Learning Engineering	Natural Language Processing (NLP)	Market Research

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Subject Matter

- **Machine Learning**

Ex: L1 vs L2 regularization, sensitivity vs specificity, PCA vs t-SNE vs UMAP

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Join types, Having vs Where clauses, Relational vs. Document-Oriented database

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- **Business Knowledge**
KPIs, LTV, A/B Testing vs. Multi-armed Bandits

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- Different companies use different combinations of interview formats

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Take-home assignment: they provide data, a question, and a time limit (2-3 hours to 1 week).
You produce an annotated Jupyter notebook and executive summary of the results and how they impact the company.

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- **Case Studies**
Long (30+ min) question with no perfect solution; you engage with the interviewer and ask clarifying questions
“Here's the background of our company in the last 3 years. How can we reduce employee churn in departments X and Y?”
Can also be creating a data analysis plan, building an algorithm from scratch, etc., depending on the company focus

Preparing for the Technical Interview

- [Course page](#)



THE ERDŐS INSTITUTE

Helping PhDs get and create jobs they love at every stage of their career.

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Job Help

May-Summer 2024

Jun 7, 2024 - Aug 30, 2024

[Withdraw](#)

You are registered for this program.

Registration Deadlines

Jun 12, 2024 - Erdős participants seeking employment within the next year. Whether it's an internship, part-time, or full-time role, or you are looking to advance your career.

Category

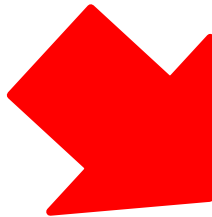
Launch, Workshops, Interview Practice/Study Groups, Job Resources, Career Advisors

Overview

Workshops, study groups, resources and 1-on-1 assistance with putting together your application materials, submitting your resume, prepping for interviews, connecting with alumni/employers, and navigating your job offers.



Schedule



Preparing

- [Tech interview overview](#)
 - Summary of what we covered today
 - FAQ

Technical Interview Materials

Overview

Data Science "Types"

Subject Matter Topics

Interview Formats

FAQ



Lindsay Warrenburg

Head of Technical Interviews

Office Hours: Thursdays, 12-1pm

Email: lindsay@erdosinstitute.org

Preferred Contact: Slack

Participants should feel free to Slack me with any questions or comments!

Overview

- Before applying to a position, you should have a general idea of which type of data science positions you want to go into
- Since "data science" is a buzzword, jobs that are very different in nature are all labeled with that one term (data science). It's sort of like how a clinical psychologist and a cognitive neuroscientist are both psychologists, but the clinical scientist wouldn't need to understand the intricacies of performing EEG or fMRI and a cognitive neuroscientist wouldn't need to understand how to diagnose mental illness
- Much like applying for grad school where you're looking for the right fit with the PI and a niche research topic/specialization, data science jobs require just as good of a fit (I, for example, am a data scientist, but would not be hired for a company that needs a 'software engineer' flavor of data scientist)
- Job descriptions might give you some indication of the 'flavor' of data scientist, but sometimes you'll learn what the company needs as you're going through the interview process
- The GOOD thing is that you do not need to know every topic from every data science flavor to do well in your interviews. Those of you on the job market can meet with me individually and I'll help you tailor your technical interview prep for your interests!

Some "data science types" (there are more!):

- Data Engineering (e.g., database management, data warehousing)
- Software Engineering (e.g., software development, cross-platform software)
- Computer Science (e.g., encryption, operating system containers)
- Data Product (e.g., ML/AI for a specific product, such as a smartphone app, app development and productionalizing)
- Machine Learning (ML) Research (e.g., designing new ML/AI algorithms)
- Machine Learning (ML) Engineering (e.g., executing existing ML/AI algorithms)
- AI Ethics (e.g., evaluate bias in datasets and algorithms, create transparency)

Preparing

- Tech interview overview
- Tech interview resources
 - Hundreds of websites, books, and example problems

Technical Interview Resources

Technical Interview Topics

Subject Matter Resources

Interview Format Resources

1: Technical Interview Topics

Type

All



Search by Topic

Search

Update Results

533 results were found.

Click on row for information

Type	Area	Topic
Stats	Information Theory	Mutual Information
Stats	Information Theory	Shannon Entropy
Stats	Information Theory	Jensen-Shannon Divergence
Stats	Information Theory	KL Divergence
ML	Classification	SMOTE
Stats	Regression	Multicollinearity
Stats	Regression	R2
Stats	Regression	Linear Regression
Stats	Regression	Linear Regression
Stats	Basic Tests	ANOVA

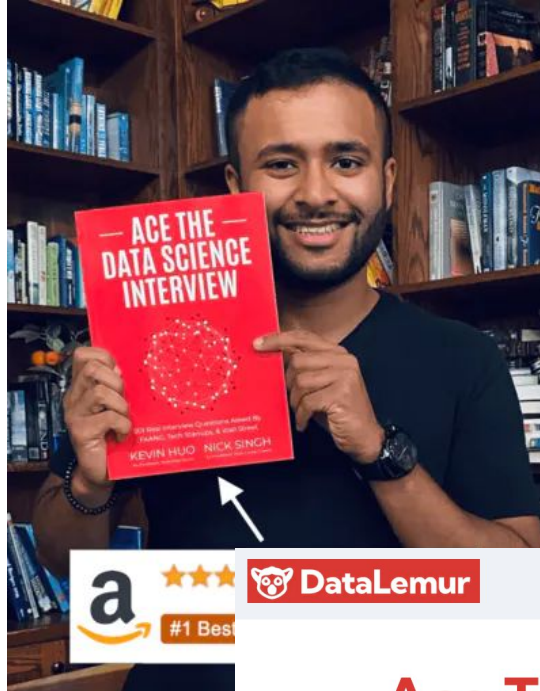
Add a resource row to the table above:

Type*: Area*: Topic*:

URL*:

Preparing

- Tech interview overview
- Tech interview resources
- [Course book](#)
- [SQL companion website](#)



Ace The SQL Interview

Practice SQL Interview questions asked by top tech companies **FOR FREE** on DataLemur. Made by Nick Singh, Best-Selling Author of [Ace the Data Science Interview](#)

COMPANY	TITLE	DIFFICULTY
LinkedIn	Data Science Skills	Easy
Facebook	Page With No Likes	Easy

Small Groups / Practice Interviews

Best for those actively preparing for interviews in the next 6 months

- Option to [sign up](#) to meet with small groups (**due June 21**)
- If you sign up
 - Private Slack channel
 - Private GitHub repo (only be visible to those who are actively preparing for interviews)
 - 9 sets of practice interviews
- Structure
 - Every week you study a topic on your own
 - Then you meet with your group to complete a practice interview

In Closing... what we covered today

1. Behavioral Interview Review:

- ❑ Create your Profile Summary / **Mini-Bio** Statement and add to your Erdős Profile Page.
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- ❑ Every company has **at least one technical** interview
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Questions?



