

# Introduction to Job Help

## Session #1

1.29.25

# 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

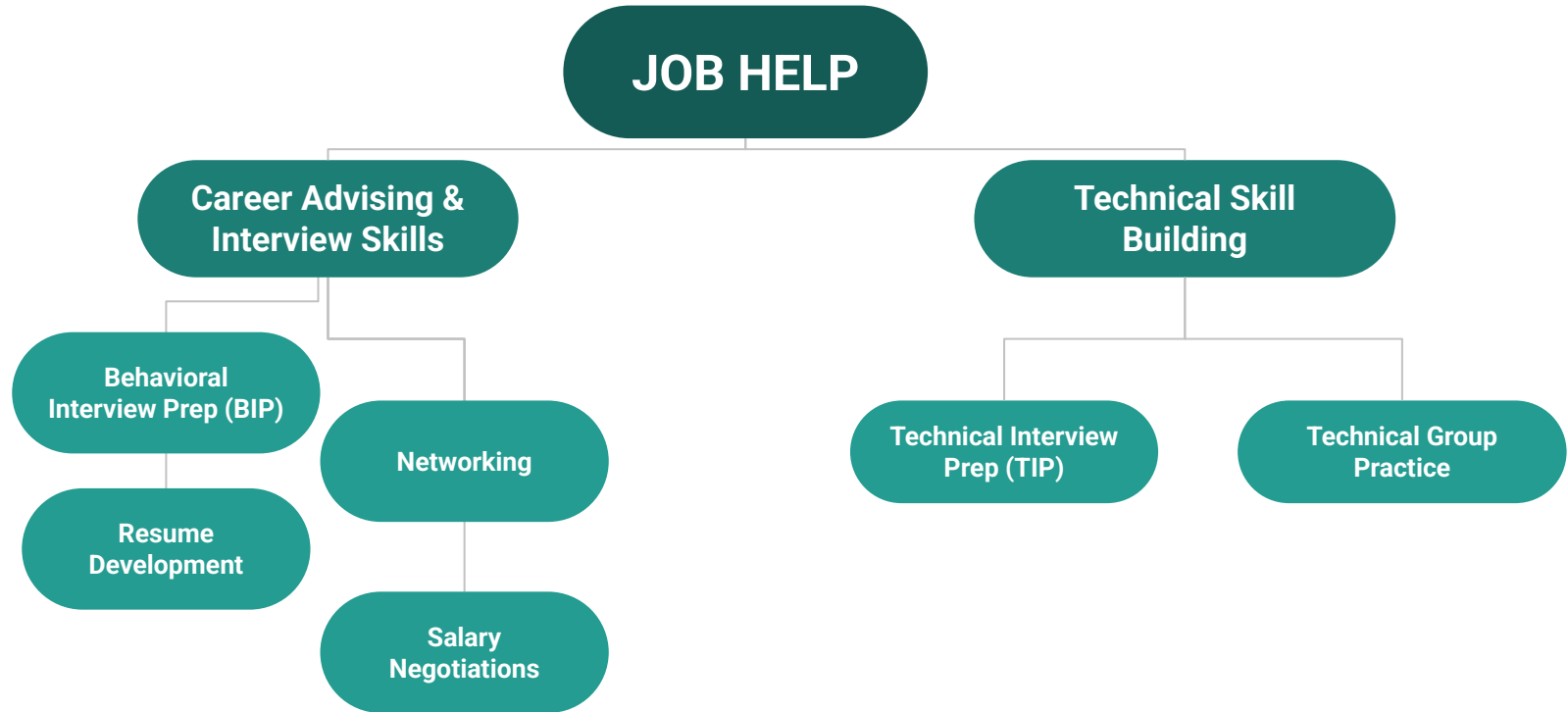


**Lindsay Warrenburg**  
Associate Director



**Andrew McMillan**  
Hedge Fund Researcher

# Structure of Job-Help...



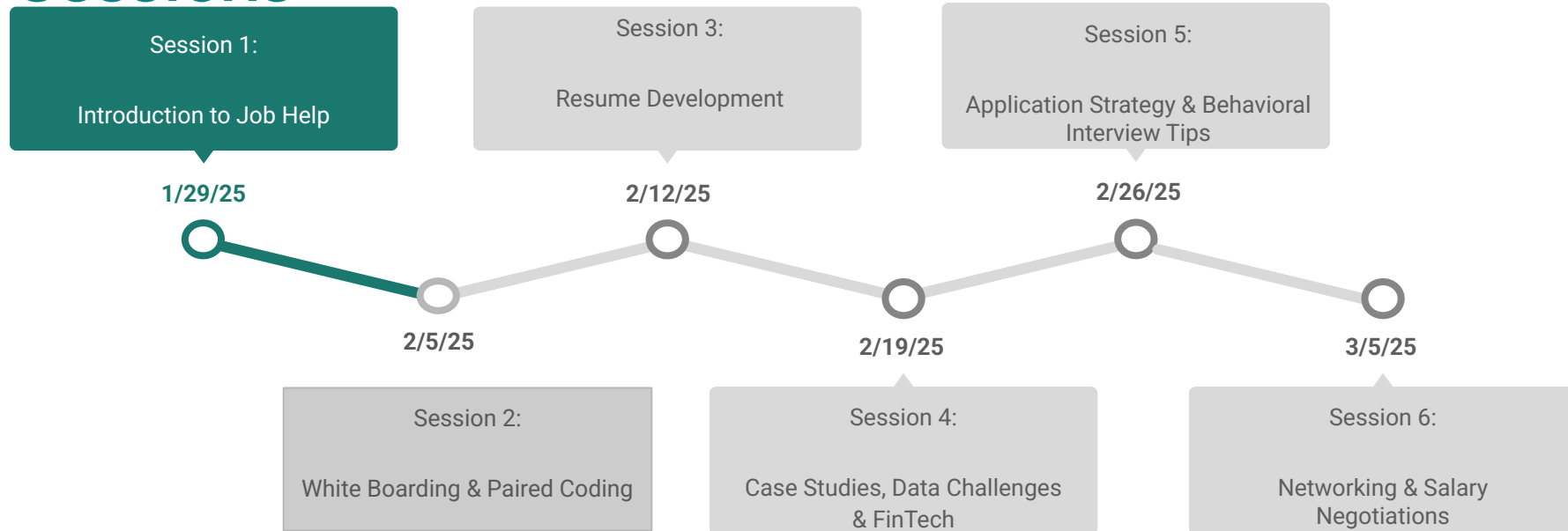
**Job Help**

**Program Schedule**

# Job Help - General

Wednesdays  
12-1 pm

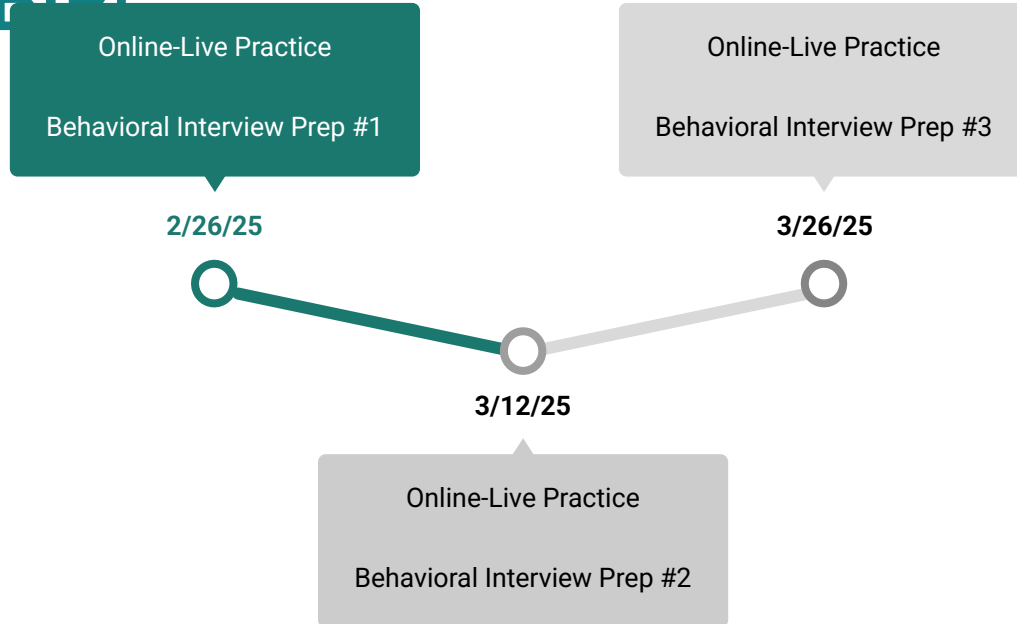
## Sessions



# Behavioral Interview Practice

Wednesdays  
5-6:30pm

(BID)



- 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)

*All times in Eastern Time*

Topic	Groups A & B	Group C
White Boarding/Paired Coding: <b>Probability</b>	February 10, 12-1pm; 8-9pm	February 11, 9-10am
White Boarding/Paired Coding: <b>Statistics</b>	February 10, 12-1pm; 8-9pm	February 11, 9-10am
White Boarding/Paired Coding: <b>Machine Learning</b>	February 10, 12-1pm; 8-9pm	February 11, 9-10am
White Boarding/Paired Coding: <b>SQL &amp; DB</b>	February 10, 12-1pm; 8-9pm	February 11, 9-10am
White Boarding/Paired Coding: <b>Computer Science</b>	February 10, 12-1pm; 8-9pm	February 11, 9-10am
Case Studies: <b>Product &amp; Business</b>	February 10, 12-1pm; 8-9pm	February 11, 9-10am
Review Data Challenge #1 w/ Group	February 10, 12-1pm; 8-9pm	February 11, 9-10am
Review Data Challenge #2 w/ Group	February 10, 12-1pm; 8-9pm	February 11, 9-10am
<b>Finance</b>	February 10, 12-1pm; 8-9pm	February 11, 9-10am



# Job Help website: <https://www.erdosinstitute.org/programs/spring-2025/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...

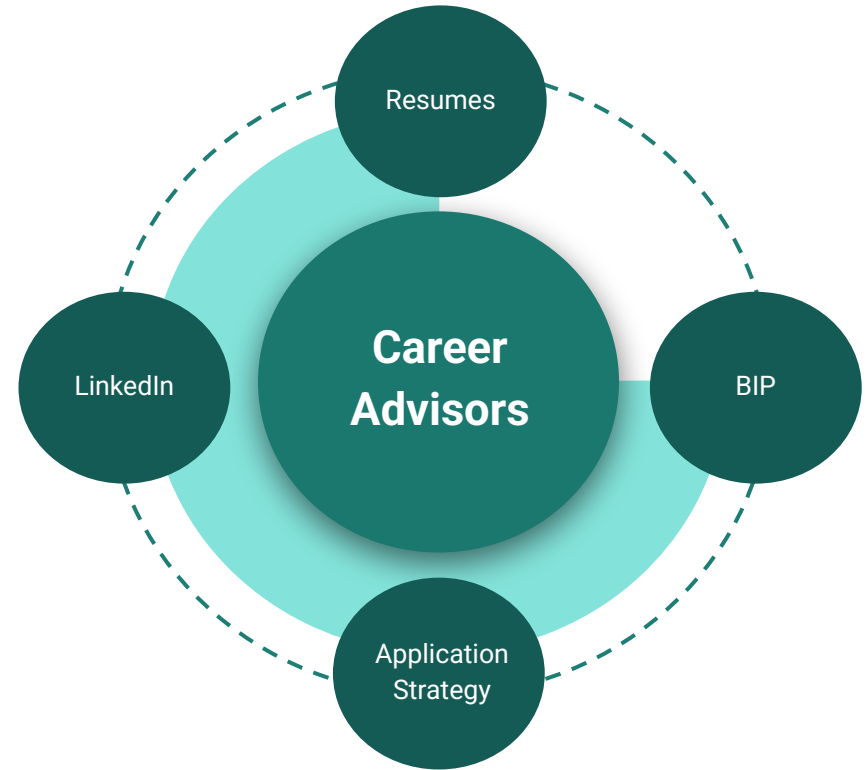
- An **industry-facing resume**
- Tools and techniques to **navigate your job search**
- Identify your **target companies and positions**
- A polished “**elevator pitch**”
- Leverage and expand your **network**
- Common Interview Questions
- Industry Etiquette
- And much more...!



# 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
- 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*
  - Extension 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!**



# What Are Hiring Managers Looking

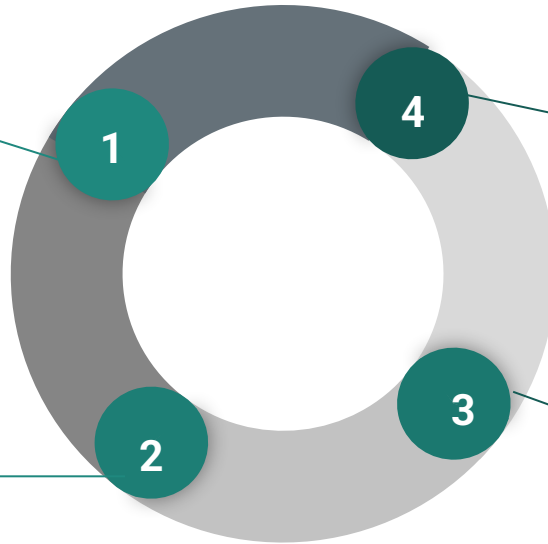
## For?

### Aptitude

- Fit to the Job Description

### Your Value to their Company & Job

- What will you bring to them (Profile Statement)



### Personality

- Teamwork, leadership

### Impact

- Experience, transferable skills

# 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...**

# 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 February 12th:*

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 and upload to your Erdős Profile Page.
  - ❑ [Resume Templates](#) and [Example Resumes](#) can be found under the Program Content Section within the Job-Help page.

# Resources:

- Employment Fundamentals Workbook - Job Help Page>Download.
- Job Help - Sample Resumes
  - [https://drive.google.com/drive/folders/1Fh9p6uz49GBF259D\\_GR\\_A\\_SgIFToGqMa?usp=sharing](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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- Job descriptions will 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

# Subject Matter

- **Machine Learning**

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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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- Each company's technical interview is (most likely) multiple steps, each with a different format
- 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).  
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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](#)



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## Job Help

Spring 2025

Jan 29, 2025 - Apr 30, 2025

This program is included with **Spring 2025 Career Launch Cohort Enrollment** and **Erdős Institute Alumni Club Membership** at no additional cost.

Withdraw

You are registered for this program.

### Registration Deadlines

**Jan 29, 2025** - 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



Resume Template



Employment Fundamental...

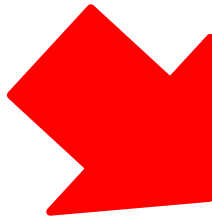


Behavioral Interview Tips



Interview Checklist (Befor...

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](mailto: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

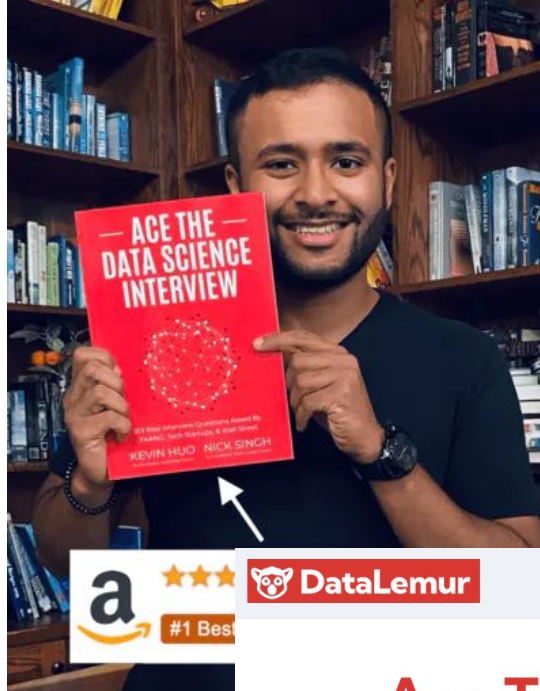
Add a resource row to the table above:

Type\*:  Area\*:  Topic\*:

URL\*:

# Preparing

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



Sign

## 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 (deadline on our course page)
- 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.
- ❑ Develop your **LinkedIn** profile and add URL to your Erdős Profile Page.
- ❑ Start drafting a one page **Resume** (My Profile>>Job Help) and upload to your Erdős Profile Page.
- ❑ **Resume Erdős Template** and Example Resumes in Program Content Section
- ❑ Once the draft is done, connect with your Erdős Career Development Advisor for Resume Review.

## 2. Technical Interview Review:

- ❑ 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

# Questions?





