

Mastering the Data Science Interview

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Slides: <https://bit.ly/2JRWnKZ>

IT WOULD START WITH FIVE MINUTES
OF PEELING LINT FROM DRYER TRAPS
FOLLOWED BY AN HOUR OF PRESSING
A LIGHTSABER HANDLE AGAINST
THINGS AND SWITCHING IT ON.
THEN I'D RETIRE TO A LIFE OF LUXURY.



WHEN PEOPLE ASK ME TO DESCRIBE MY DREAM
JOB, I'M NEVER SURE HOW REALISTIC TO BE.

Why

Process

Data science topics

Gaming the process

Why



Why

- **Calibration:** Some data scientists spend months or years preparing for interviews. You're competing with them.
- **Familiarity:** Writing code at a whiteboard is unusual. If you have to do it, you may as well do it well

Process

People

- First link
 - **Sourcer:** Working in bulk
 - **Referrer:** Your advocate
- **Recruiter:** Your advocate
- **Interviewers:** Limited time to evaluate you
- **Hiring Manager:** Stakeholder / decision maker

Steps

- **Begin relationship:** Refer / apply / source finds you
- **Non-technical screen:** Culture fit / minimum skill set on paper
- **Technical screen:** Minimum skill set
- **Take home / data challenge:** Usually requires 5-10 hours
- **Onsite:** Culture fit, able to add value, able to collaborate
- **Follow ups:** Salary, manager, timing
- **Offer:** \$

Artifacts

- Resume
- LinkedIn
- Data challenge submission
- Internal packet / scores

Phone -> Phone ->
Data Challenge -> On-site ->
Offer

Data science topics

Common questions

- **Data splits:** Train / test, cross validation, stratification, sampling concerns, etc
- **Regularization:** L1 & L2, dropout, data augmentation
- **Model validation:** Metrics, SLAs, use cause, audience

Common interviews

- **What would you do?:** Given a data set, describe your modeling workflow
- **Case study:** Given model outputs, make a presentation
- **Algorithm:** Let's write KNN!
- **Presentation:** Present a project you've done

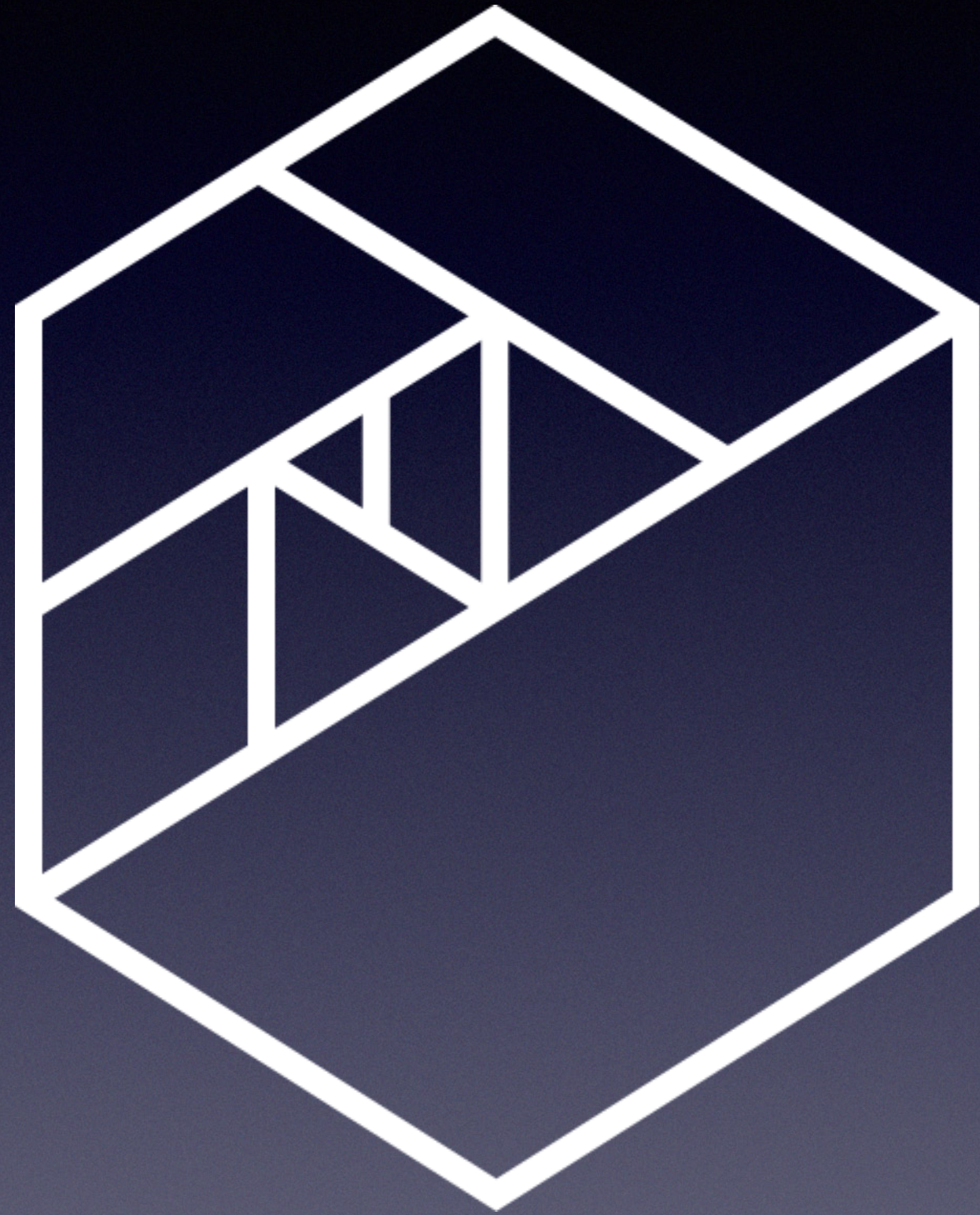
Gaming the process

CRACKING *the* CODING INTERVIEW

189 PROGRAMMING QUESTIONS & SOLUTIONS



GAYLE LAAKMANN MCDOWELL **6TH** EDITION
Author of Cracking the PM Interview and Cracking the Tech Career



METIS

Resume

- Optimize for each person (recruiter, interviewer, hiring manager)
- Optimize for 10 second read, 30 second read, 5 minute read
- Communicate your accomplishments clearly and succinctly
- Have someone look at your resume, and try to repeat is blind

LinkedIn

- See resume
- + Have a professional picture

Evaluation criteria

At all times, communicate:

- **Technical skills:** What can you bring to the table
- **Interpersonal skills:** Are you an enjoyable person to spend time with?
- **Collaborative skills:** Can you build things while working with other people?

Gotchas

- **Don't lie:** Unless you know that you won't get caught
- **Ego:** Some shops are looking for people with egos. Some people avoid the 'genius jerk' like the plague
- **Depth:** Understand that you will know some areas better than the interviewer (be humble), and that the interviewer will know many areas better than you (be interested and honest)
- **Passion:** Act like every job is your dream job. It might actually be.

Opportunities

- Work your network!
- Show passion for previous work
- Speak positively of everyone you've ever worked with
- Challenge the interviewer

LIFE SCORECARD

TIMES WHEN I THOUGHT...

"I'M NOT REALLY HAPPY HERE, BUT
MAYBE THIS IS THE BEST I CAN EXPECT
AND I'LL REGRET GIVING IT UP."

...IT TURNED OUT I...

| SHOULD HAVE STAYED | SHOULD HAVE LEFT SOONER |
|-----------------------|----------------------------|
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Thanks!

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