

karat^

Engineering the technical interview

Presented by

Shannon Hogue

DevExec World



© 2019 Karat. All rights reserved



Hello! I'm Shannon Hogue

Head of Solutions Engineering at Karat

[linkedin.com/in/shannonhogue/](https://www.linkedin.com/in/shannonhogue/)

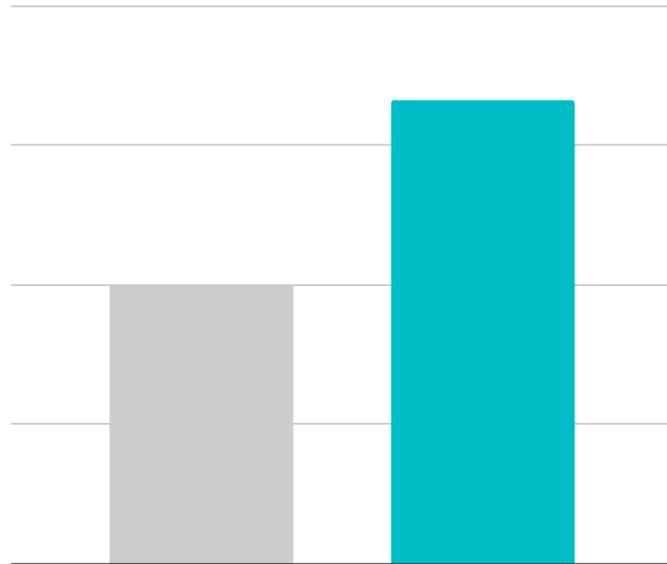
Quote from a recent software engineering candidate

“Interviews change lives”

The Interview Gap

When an organization cannot conduct the number of interviews with the quality and consistency required to hire new team members

Are you falling into the Interview Gap?



Engineering leaders confident in reaching their hiring targets conduct **66% more interviews** than those who are not confident

Measuring the Interview Gap

Capacity

71%

of engineering leaders it would be easier to hit hiring targets **if they had more time** to interview

Consistency

81%

agree it would be easier to hit hiring targets **if they had more qualified people** to interview candidates

Engineering a consistent high-quality technical interview

Define hiring
competencies

Create formats
and questions

Conduct the interviews
professionally

Measure candidate
performance consistently

Establish a clear
hiring bar

Analyze hiring data
to evolve approach

1 of 6

Define hiring competencies

Job analysis

In the role of **Senior Engineer** focusing on the Payments platform, you will take an active role in leading and fostering innovation in the payment industry.

You belong on this team if:

- You are hands-on engineer and love what you do
- You enjoy working with globally distributed team
- You are self-driven and highly motivated
- You are able to adapt quickly to changes
- You strongly believe in test-driven development
- You are a team player who is happy to collaborate

Technically qualifications

- 5+ years of server-side software development experience
- 5+ years of experience in object-oriented programming
- Solid expertise in building highly scalable, distributed, loosely coupled systems
- Deep knowledge of concurrency, resiliency, and caching
- Excellent communication skills
- NoSQL experience
- Experience working with payment processors

- What does your team really need?
- What's a nice to have?
- Do your interview questions, and your approach, get enough signal?

Know and share your criteria

Don't assess for competencies unintentionally



Verbal English skills

US cultural awareness

Knowledge that can be learned quickly
(things you can Google, your own dev
environment, framework/coding language)

Be clear to candidates what signals you are assessing for



Testing

Code quality

Optimality vs. speed

Ability to deal with ambiguity

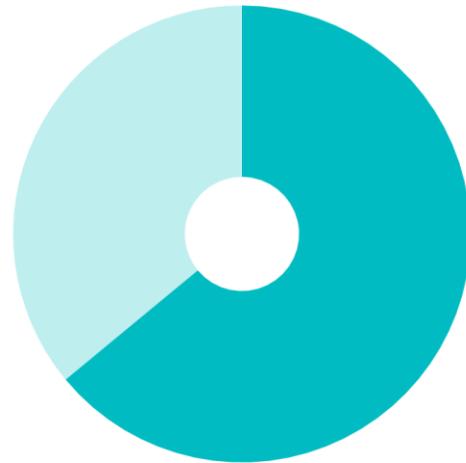
Do you maximize signal per minute?

- Are the competencies you are measuring really relevant to success on the job?
- Are multiple interviews in your loop duplicating the same type of content?
- Are you measuring each competency separately?

2 of 6

Improve formats & questions

Predicting on the job performance



64%

of engineering leaders say the typical technical interview fails to predict on the job performance

Are your interview questions predictive?

Predictive questions should be...

- Structured
- Clear on competencies and expectations
- Free from assumptions that are irrelevant to the role

Beware of unbalanced multi-part questions

Question 1:

"Find the most common letter in a given sentence."

Solution A: Sort the letters in the sentence and iterate through it once.

Solution B: Build a frequency map for the letters in the sentence and choose the maximum value.

Question 2:

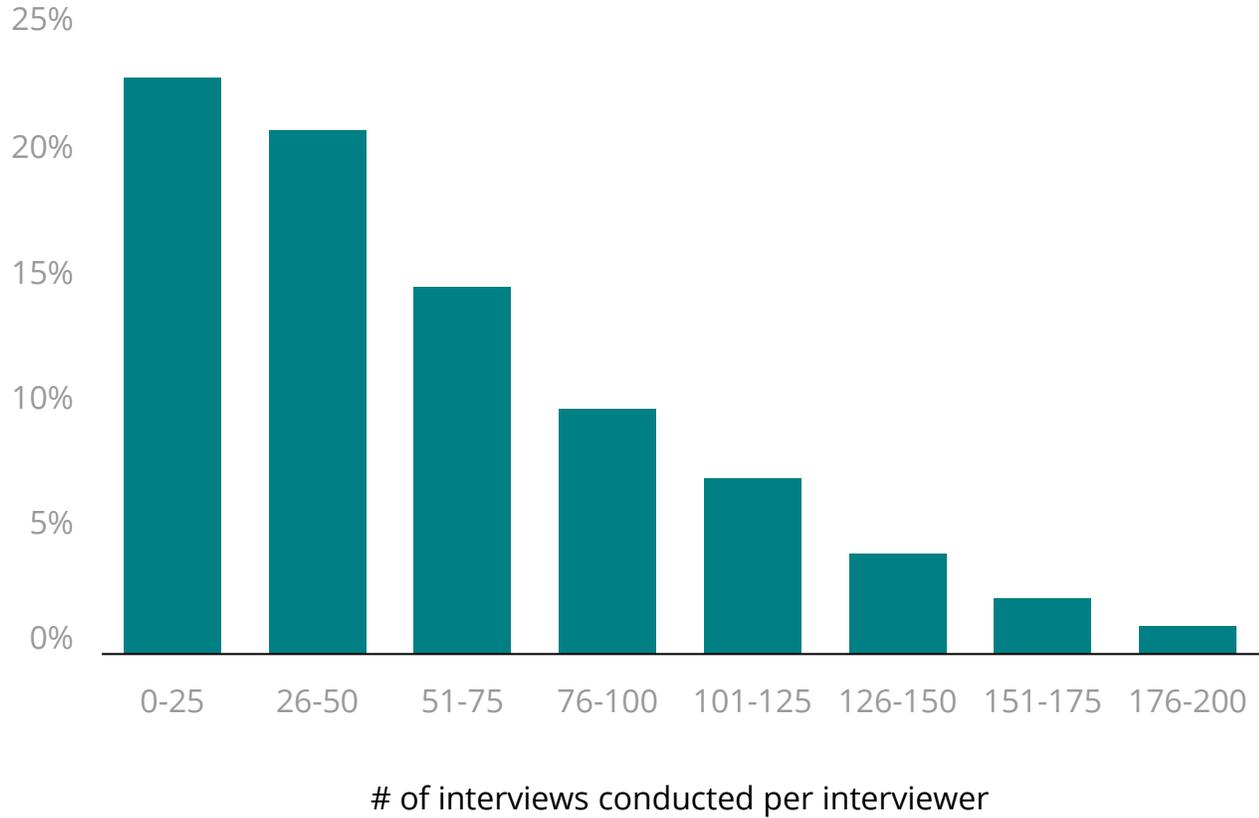
"Efficiently find the most common letter in sentence A that does not appear in sentence B."

3 of 6

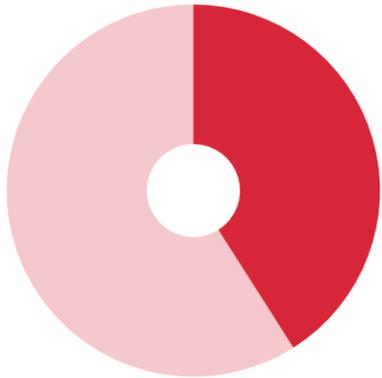
**Conduct the interviews
professionally**

Interviewers get better with practice

Percent of overall errors

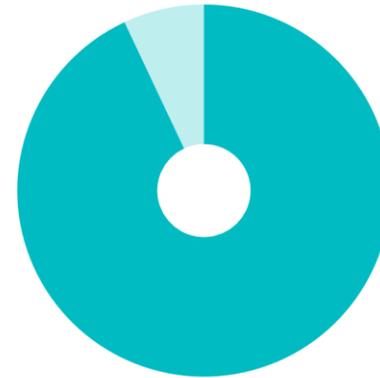


Candidate experience



Only 41%

of engineering leaders say a positive candidate experience gives them a competitive advantage



93%

of engineering leaders say it is important to improve the hiring process in 2020

Put candidates at ease

- Select interviewers that have a baseline of empathy and soft-skills
- Train interviewers on candidate experience
- Prepare candidates well
- Survey your candidates

4 of 6

**Measure candidate
performance consistently**

Structure your scoring

Detailed Results

QUALITY ?

Optimal

Acceptable

Naive

No viable approach

Not asked question

COMPLETENESS ?

Fully working

Mostly working

Partial

Trivial implementation

No implementation

HANDHOLDING ?

None

Minimal

Moderate

Heavy

ADDITIONAL NOTES

-Helped formulate approach

-Helped with logic errors

DEBUGGING ?

None

Minimal

Moderate

Heavy

Solution not ready for debugging

ADDITIONAL NOTES

-Struggled with logic errors

5 of 6

Establish a clear hiring bar

Job analysis

In the role of **Senior Engineer** focusing on the Payments platform, you will take an active role in leading and fostering innovation in the payment industry.

You belong on this team if:

- You are hands-on engineer and love what you do
- You enjoy working with globally distributed team
- You are self-driven and highly motivated
- You are able to adapt quickly to changes
- You strongly believe in test-driven development
- You are a team player who is happy to collaborate

Technically qualifications

- 5+ years of server-side software development experience
- 5+ years of experience in object-oriented programming
- Solid expertise in building highly scalable, distributed, loosely coupled systems
- Deep knowledge of concurrency, resiliency, and caching
- Excellent communication skills
- NoSQL experience
- Experience working with payment processors

- What does your team really need?
- What's a nice to have?
- Do your interview questions, and your approach, get enough signal?

Scoring rubric categories

Recommendation categories are determined based on how they perform in the interview.

		Recruiter action steps
Likelihood of getting offer →	Fast track	High performer. Call candidate ASAP (<4hrs) and schedule onsite, possibly looping in HM
	Invite to next round	Strong candidate. Invite to onsite interview
	Requires further review	Seek input from engineer to evaluate Karat results. Depending on feedback either invite to onsite or schedule rejection email.
	Do not pursue	Schedule rejection email with 48 hr delay. If candidate requests a Redo then cancel rejection email.

Aligning competencies to onsite results over time

Initial calibration

1-50 interviews

Ongoing alignment

51-100+ interviews

Competencies

Competencies	Value
CS fundamentals	Moderate
Coding style	Minimal
Communication	Moderate
Java	Critical
Systems design	Moderate

Interview results

Recommendation	Candidates	O:O*
Fast track	5	70%
Invite to next round	20	50%
Requires further review	20	40%
Do not pursue	5	0%

Competencies

Competencies	Value
CS fundamentals	Moderate
Coding style	Minimal
Communication	Minimal
Java	Critical
Systems design	Moderate

Interview results

Recommendation	Candidates	O:O*
Fast track	5	70%
Invite to next round	25	60%
Requires further review	15	30%
Do not pursue	5	0%

* Onsite to offer ratio



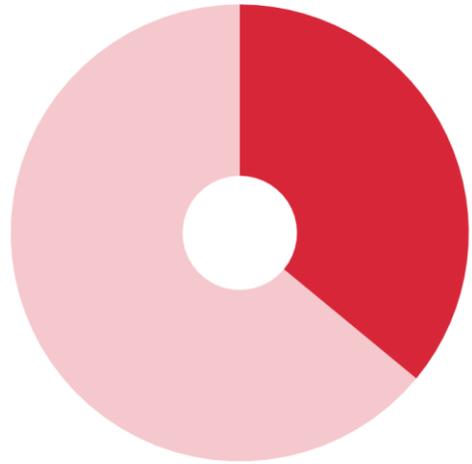
Impact of the hiring bar at Company X

Candidates	Karat recommendation	Outcome	Where'd they go?
Candidate A	☐ Fast track	Rejected after onsite	Microsoft
Candidate B	☐ Invite to next round	Rejected after onsite	Zillow
Candidate C	☐ Invite to next round	Rejected at phone screen	Google
Candidate D	☐ Invite to next round	Rejected after onsite	Google
Candidate E	☐ Invite to next round	Rejected after onsite	Palantir
Candidate F	☐ Invite to next round	Rejected after onsite	Google

6 of 6

**Analyze hiring data
to evolve approach**

Few teams monitor the hiring funnel



Only 36%

of engineering leaders say they track and monitor onsite to offer ratio

Set yourself up to capture and analyze data

Broken taxonomy

Hiring Stages

- 1) New
- 2) Application Review
- 3) Contact Candidate
- 4) Candidate Contacted
- 5) Take Home Test
- 6) Hold
- 7) Pre-Screen
- 8) Review
- 9) HOLD
- 10) Exploratory Call
- 11) Initial
- 12) Interview Round
- 13) Follow-Up Interview
- 14) Face to Face
- 15) Debrief
- 16) Reference Check
- 17) Sell Call/Meeting
- 18) ECR Approved
- 19) Offer
- 20) Hired

Data quality

Activity

Aug 5, 2017

11:12am

Rejected from Software Engineer

I have discussed about this great opportunity for several days and just made the decision to work somewhere else.

Who rejected who?

Insights from interviewing at scale

Duration N = 5578	Fast Track	Invite to Next round	Requires Further Review	Do Not Pursue	Total %
0-5 minutes	54%	31%	~0%**	--*	0.2%
5-10 minutes	66%	27%	~2%***	--*	4.1%
11-15 minutes	35%	44%	19%	2%	9.3%
16-20 minutes	10%	52%	34%	4%	12.2%
21-25 minutes	2%	44%	48%	6%	10.8%
26-30 minutes	<1%	24%	64%	12%	10.8%
31-35 minutes	<1%	14%	66%	19%	9.2%
35-40 minutes	--	3%	57%	40%	7.3%
41-45 minutes	--	<1%	13%	87%	31.1%
All candidates	8%	20%	32%	40%	100%

Key takeaways

Dedicate an engineer to focus on each part of the interview machinery to deliver and scale a consistent interview

Centralize interviewing. Interviewers get better with experience and frequency

Make sure you have a way to **measure and train** interviewers by recording interviews and introducing feedback loops

Key takeaways

Dedicate an engineer to focus on each part of the interview machinery to deliver and scale a consistent interview

Centralize interviewing. Interviewers get better with experience and frequency

Make sure you have a way to **measure and train** interviewers by recording interviews and introducing feedback loops

Key takeaways

Dedicate an engineer to focus on each part of the interview machinery to deliver and scale a consistent interview

Centralize interviewing. Interviewers get better with experience and frequency

Make sure you have a way to **measure and train** interviewers by recording interviews and introducing feedback loops

Thank you