

# FIXING THE TECH INTERVIEW

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PyGotham 2017

INTERVIEWING IS AWFUL.

Full stop.





**Max Howell**

@mxcl

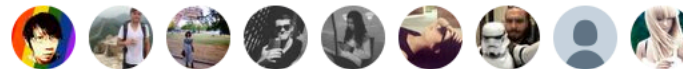
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Google: 90% of our engineers use the software you wrote (Homebrew), but you can't invert a binary tree on a whiteboard so fuck off.

10:07 AM - 10 Jun 2015

7,110 Retweets 8,645 Likes



520



7.1K



8.6K



“[A]t Google, I tried to hire one of the most productive programmers I know, who was promptly rejected by a recruiter for not being technical enough.”

– <https://danluu.com/programmer-moneyball/>

How many stories like these could **you** tell?

How many have you heard from **friends** and  
**co-workers**?

# WHY IS IT SO AWFUL?

I'm glad you asked that question!



# FOLLOW THE LEADER

Copying someone bigger  
*always* works, right?



# JUST A BIT OFF-TARGET

Do you *really* know who  
you're trying to hire?

**You  
emphasize  
algorithm  
challenges**



**Algorithm  
challenges  
favor recent  
graduates**

**Why can't we find  
experienced  
people?**



**They start  
influencing  
your  
interviews**

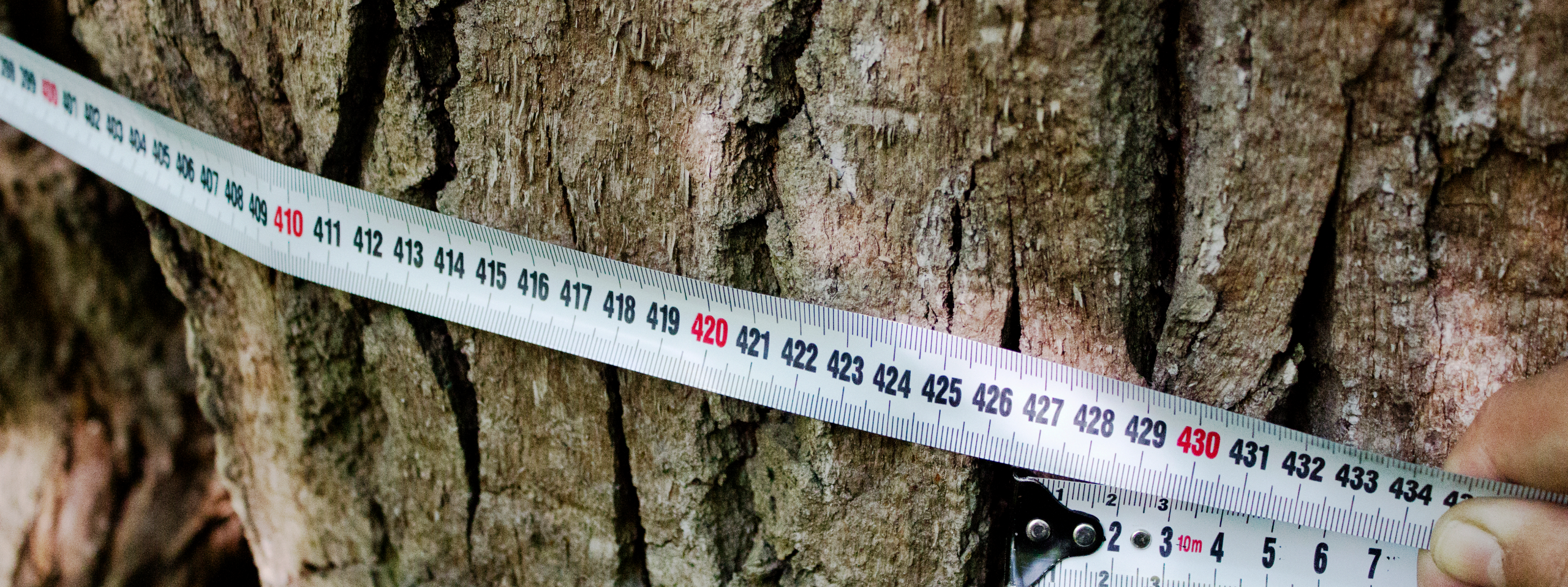


**You hire a  
bunch of  
recent  
graduates**

“[P]oor performances in technical interviewing happen to most people, even people who are generally very strong. However, when we looked at our data, we discovered that after a poor performance, women are 7 times more likely to stop practicing than men”

– <http://blog.interviewing.io/you-cant-fix-diversity-in-tech-without-fixing-the-technical-interview/>





# MEASURING THE WRONG THINGS

Use proxies for network services, not for job skills.



# INTERVIEW “SKILLS”

- Algorithm regurgitation
- Whiteboard coding
- Implementing basic data structures
- Confidence
- Having a prolific GitHub “résumé”
- Having free time to do code challenges
- “Performing” on demand
- “Competitive” programming
- Being able to wait weeks/months for a process to complete

# JOB SKILLS

- Analyzing problems
- Knowledge of common patterns and architectures
- Articulating tradeoffs
- Communicating
- Collaborating
- Empathy
- Asking for help
- Giving help when asked
- Working with non-tech colleagues

What percentage of a typical day do you spend in your editor/IDE **writing code** which will end up in production? What percentage of it do you spend doing **other things**?

Does your interview process reflect that?

# HOW DO WE FIX IT?

The first step is admitting  
you have a problem.

First, throw out your assumptions.





**BE REALISTIC**

Unrealistic interviews have  
unrealistic results



# STEPS TO MORE REALISTIC INTERVIEWS

1. Use **real-world problems**
2. Use **a real computer**, with the candidate's preferred text editor/tooling
3. Let candidates **use Google** and other references
4. Encourage **real collaboration** – not just “thinking out loud”
5. Use **real-world time limits**



Interview sessions should treat candidates as **peers**, not pretenders; as **colleagues**, not as con-men.

Explore things **together**, rather than just setting a problem and watching someone squirm.

# IDEAS FOR TECHNICAL SESSIONS

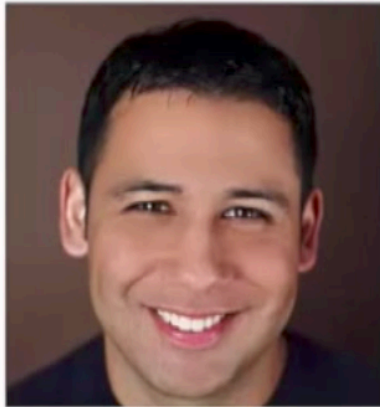
- Do a code review with the candidate. And it doesn't have to be their code!
- Pair programming – bring a bug and work through it together
- Give them a rough spec and see how they refine it and break it down into assignable units of work
- Give them notes from a problem and ask them to write a post-mortem on it

**Non-technical sessions\*** are just as important as technical ones.

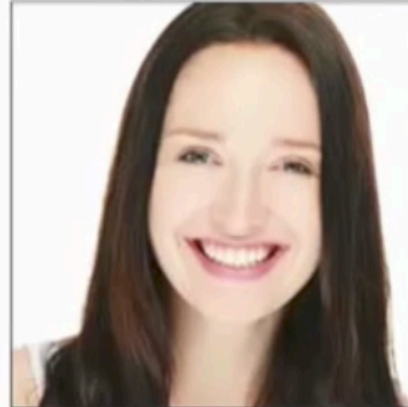
**Involve non-engineers**, because your engineers should work with them.

\* “Culture fit” doesn’t count!

2015 **NDC**  
NORWEGIAN DEVELOPERS CONFERENCE  
15-19 June · Oslo, Norway



Ricardo  
Gutiérrez

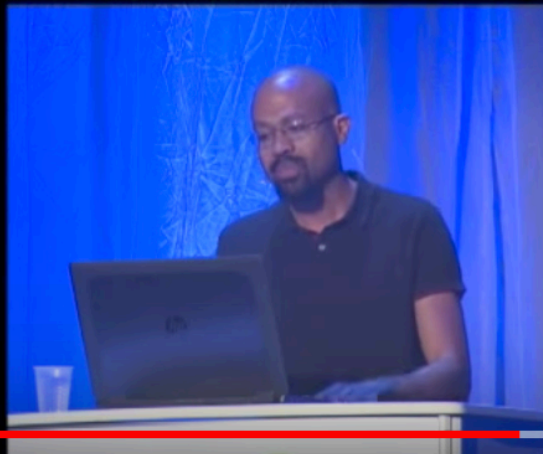


Angie  
Tamberland



Amy Dare-  
Obsanjo Umdede

#WeWillLocateTheMissingBrownAnd  
FemaleDiversityPeopleWhoAreHavingA  
FantasticTimeOnTechCompanyWebsites  
ButDon'tActuallyAppearToWorkAtThe  
ActualCompanies



7:24 / 28:27



Interview panels should be **diverse**.

You'll learn things about candidates that **wouldn't have come up** in a panel consisting solely of men or white people.

```
>>> import this
```

```
The Zen of Python, by Tim Peters
```

```
...
```

```
Explicit is better than implicit.
```

Sit down with your team and figure out what you really value, and **write it down**. Watch out for vague terms like “professionalism”, “confidence”, or “potential”.

# PROFESSIONALISM?

- Is a hair style “professional”?
- What about a tone of voice?
- Or an accent?
- Or a style of dress?
- Or a way of walking?
- Or a name?



# CONFIDENCE?

- Do you know what confidence is a sign of? Confidence.
- Is asking questions a sign that someone doesn't have "confidence", or a sign that they want to thoroughly explore a problem?
- Does a tone of voice imply "confidence" (or lack of it), or is it just the way someone happens to talk?

# POTENTIAL?

- A loaded word!
- Often, men and white people are seen as having “potential”. Even when they have a track record of failure!
- While women and people of color aren’t – it’s just assumed that where they are now is their peak
- And even if you could dodge bias, “potential” isn’t something you can ever hope to detect or quantify in a reliable way

# THREE QUESTIONS TO ASK

What **qualities** do I value most in the people I work with?

How would I **evaluate** a stranger on those qualities?

This approach I'm considering – **does it really evaluate** what I want it to?

# BE BLIND

You can't always avoid knowing about a candidate, but **blind interviewing** practices have been shown to make a **huge difference!**



“[O]ur results show that women’s contributions tend to be accepted more often than men’s. However, women’s acceptance rates are higher only when they are not identifiable as women.”

– <https://peerj.com/preprints/1733/?td=sd>



“They put a screen in front of the actual people who were looking to hire people in this orchestra, so all they heard was the music that was being played—and the decisions they made from that hiring method meant that an all-white male orchestra moved to half-female, half-male, and with a lot more diversity”

– <https://www.fastcompany.com/3057631/how-blind-recruitment-works-and-why-you-should-consider>

# BLIND INTERVIEWING IN TECH

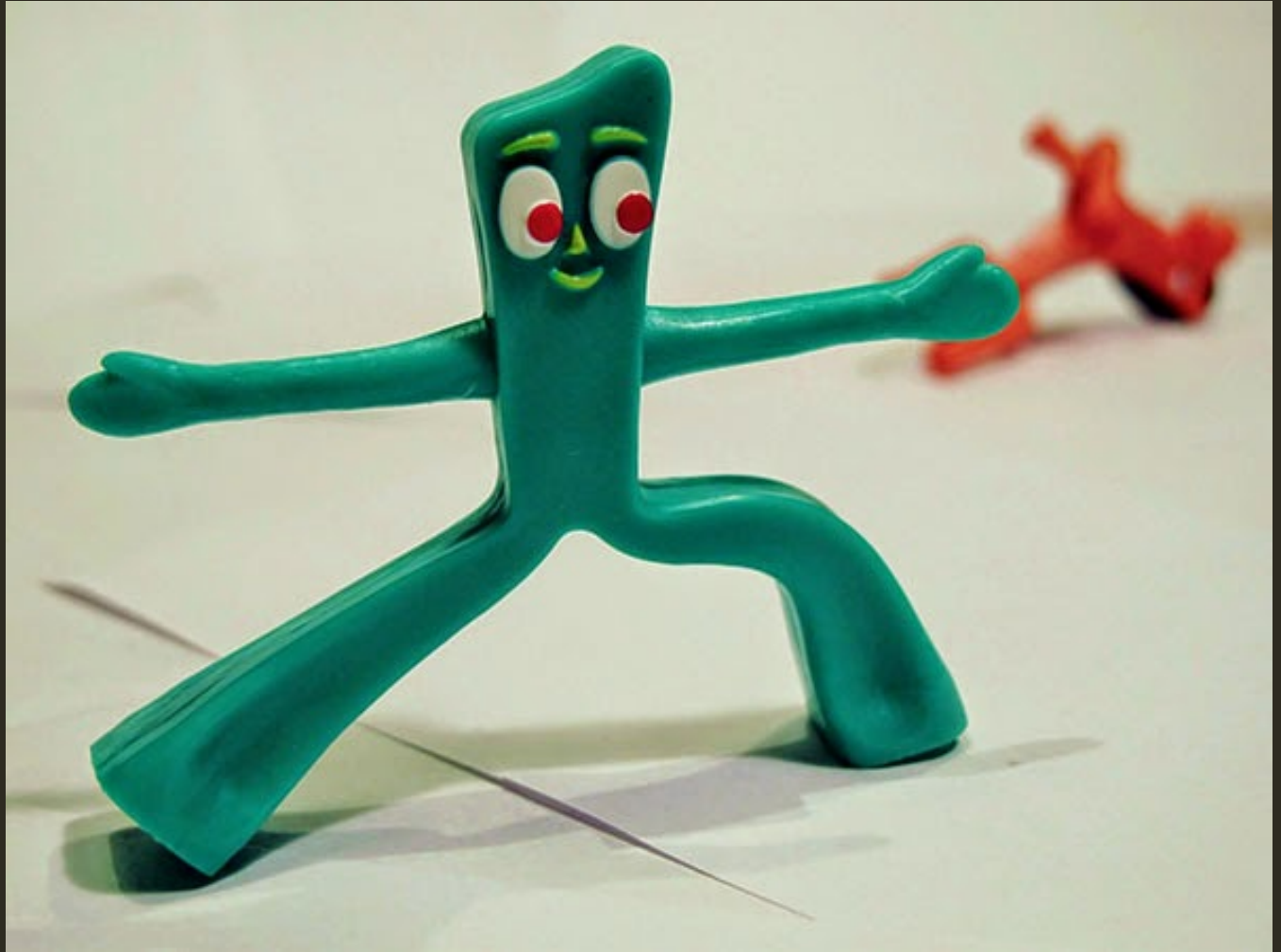
- You can **scrub some information** from résumés before they get to a decision-maker's desk, so you can't infer gender or race from that
- You can **anonymize code samples** before handing them over for review (i.e., "Candidate 147's code" rather than "Jane's code")
- This is **not foolproof**

“Letters of recommendation that don’t use first names may nonetheless reveal the sex of the person being written about. Women get described as caring about their students or clients, while men are said to have strong relationships with those groups.”

– <https://www.theguardian.com/women-in-leadership/2013/oct/14/blind-auditions-orchestras-gender-bias>

# BE FLEXIBLE

**Consistent** interview practices are a requirement, but that doesn't mean you can't **accommodate** humans



Consistent  $\neq$  Fair

# THE MOST IMPORTANT THING

Someone you're interviewing is just a colleague you haven't worked with yet.

They're human, just like you, and deserve to be treated with respect and humanity.



**Kenneth Love**

@kennethlove

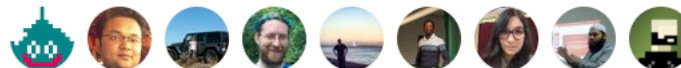
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I've had so many people tell me they felt hurt, ashamed, insulted, etc after tech interviews. An interview that ends in tears was a bad one.

9:58 AM - 21 Jun 2017

3 Retweets 41 Likes





Nicole

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James

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