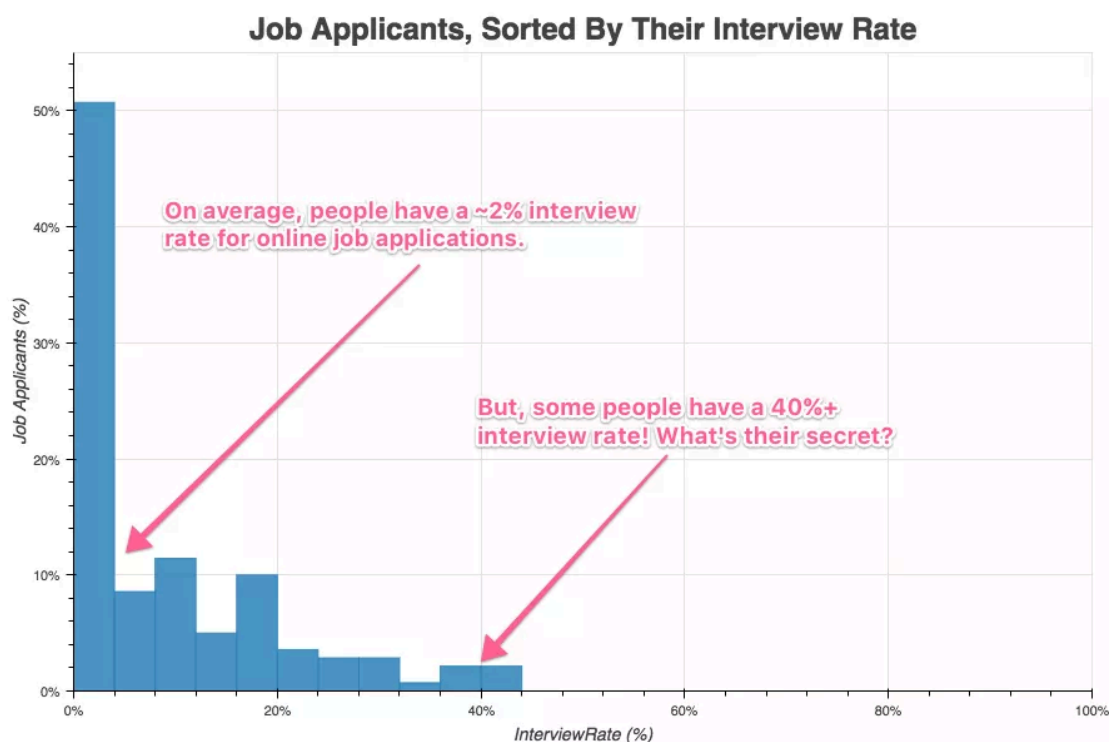




# The Science of The Job Search, Part I: 13 Data-Backed Ways To Win

It's the New Year! And what does that mean? Fireworks, champagne and New Year's Resolutions. It turns out **fully 63% of people's New Year's resolutions are about jobs**: negotiating that promotion, quitting that job you've always hated, or getting that new job you've always wanted.

But, as we all know, getting a job is *hard*. Clearly, there are jobs out there. And clearly, some people are getting those jobs. In fact, although people have a ~2% interview rate for online job applications on average, **some TalentWorks subscribers have a 40%+ interview rate!**

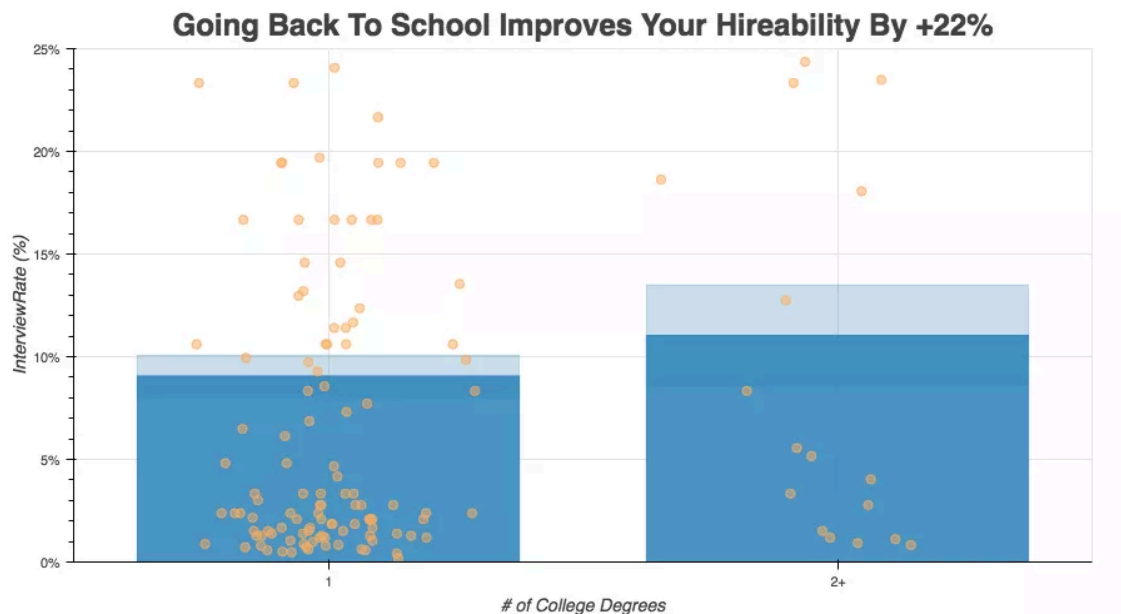


We call these folks our “*A-List Talent*.” **What’s so special about them?** What’s their secret? And is there anything you can learn from them?

We **analyzed 4,000+ job applications and job applicants** from the past few months and, using some fancy math and a bit of elbow grease, **identified 13 key factors out of 100+ possible factors that drove up our A-List Talent’s interview rates**. So, without further ado, let’s get to it: *What can you learn from our A-List Talent’s super-high hireability to (finally) get that job you deserve in 2018?*

## Factors you can’t control

## #3: Go back to school. [+22% BOOST]

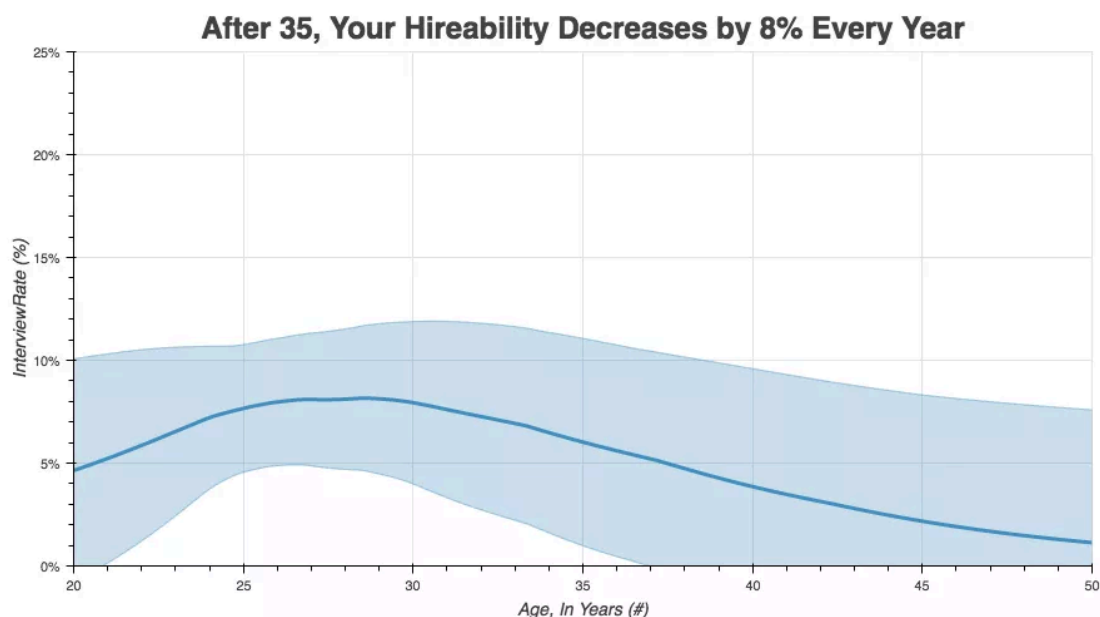


**Having a 2nd degree boosts your chances of getting an interview by +21.9%.**

Why is this something you can't (easily) control? I don't know about you, but not everyone can put their life on hold, spend four years and tens of thousands of dollars of school in the hopes of getting a better job... four years from now.

**Job Search Tip:** Except in rare scenarios, **you should not go back to school for a 2nd degree just to improve your job prospects.** When you factor in opportunity cost, you usually come out behind – it's just not worth it.

## #2: Be older. (Or younger.) [+25% BOOST]



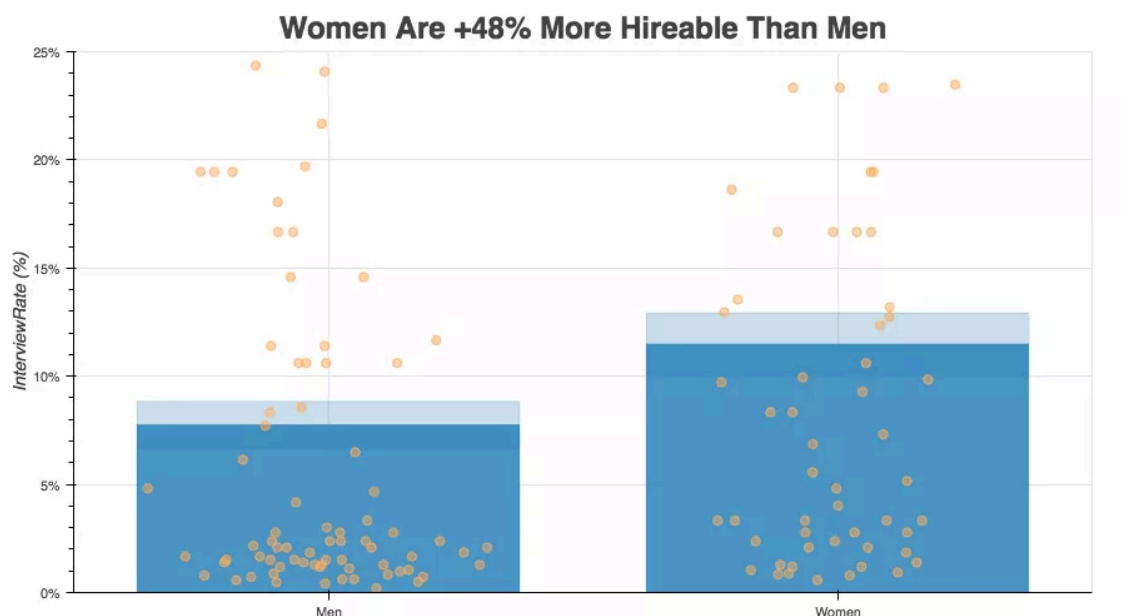
Age matters. A lot, sadly. Your chances of getting a job at age 20 are pretty bad. At 30, they're OK. At 40, they're getting bad again. It might be illegal, but age discrimination is very real.

The **best age to get a job is between 28 and 35**. During this time, you get a **+25.1% hireability boost** over everyone else. Up to age 28, your hireability is increasing by +9% every year. After age 35, your hireability drops by 8% every year.

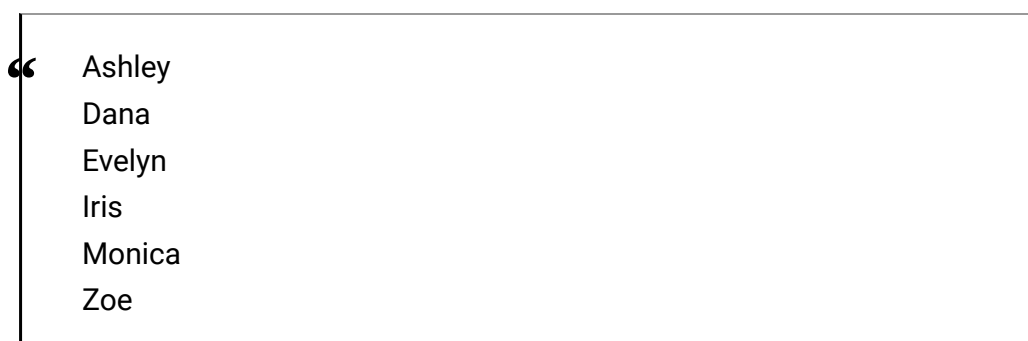
But, here's the rub: this is *inferred* age. **Hiring managers (subconsciously) guess your age based on your graduation date**, how much experience you have, etc. If you don't show your graduation date, they can't tell how old you are. If you only have your most recent 2-3 jobs listed, they can't tell that you started working in the 1980s.

**Resume Tip:** Don't list your graduation date if you're older than 35. If hiring managers can't guess your age, they can't discriminate against you based on it.

## #1: Be a woman. [+48% BOOST]



Resumes with **obviously female names** had a **+48.3% higher chance** of getting an interview. For example:



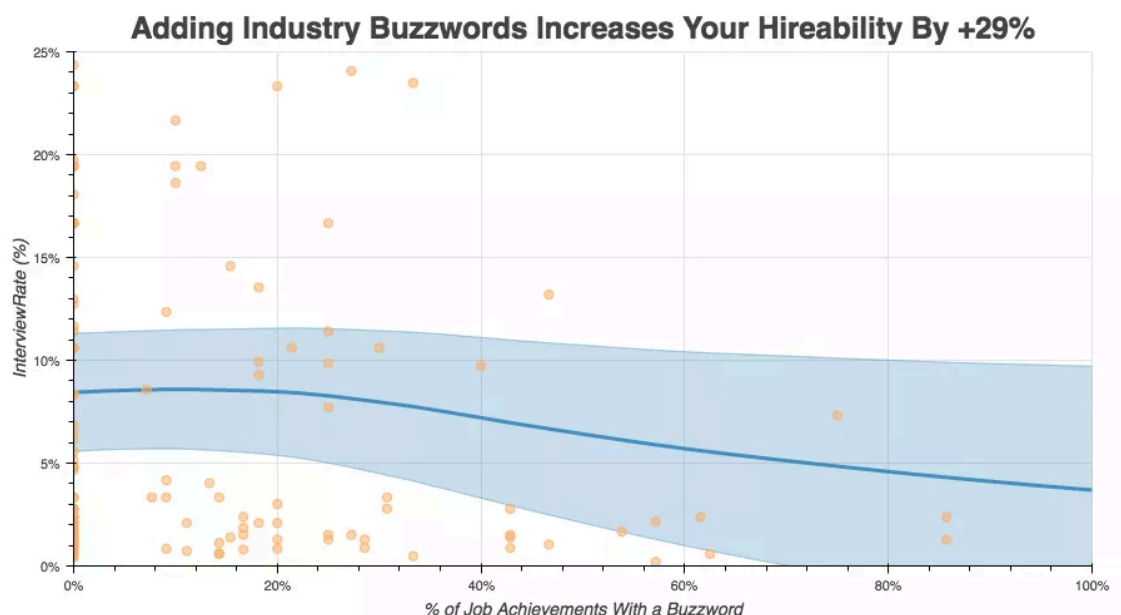
This effect was initially very surprising to us, but when you think it about it, it's really not. Dozens of studies show that women often don't get what they deserve (basically) because they don't ask for it. **This shows that, when women do ask for what they deserve, they're often recognized for it.**

In the past several months, women across the country have become more vocal about their rights, from standing up to sexual harassment to supporting each other in the workplace. Between the clear (data-proven) benefits of hiring women, that women are outperforming men in school, and the fact that most recruiters are women (who want to support other women), it makes 100% sense why women might be getting a boost when they apply for jobs.

**Job Search Tip:** To all the women out there who might question themselves, undervalue their contributions, or wonder if they truly deserve it, **push through the discomfort and demand what you deserve (the job, the raise, the promotion)**. You miss 100% of the shots you don't take but, at least with job applications, when you do take that shot, you'll **get a +48.3% boost over the competition**.

# Factors you *can* control

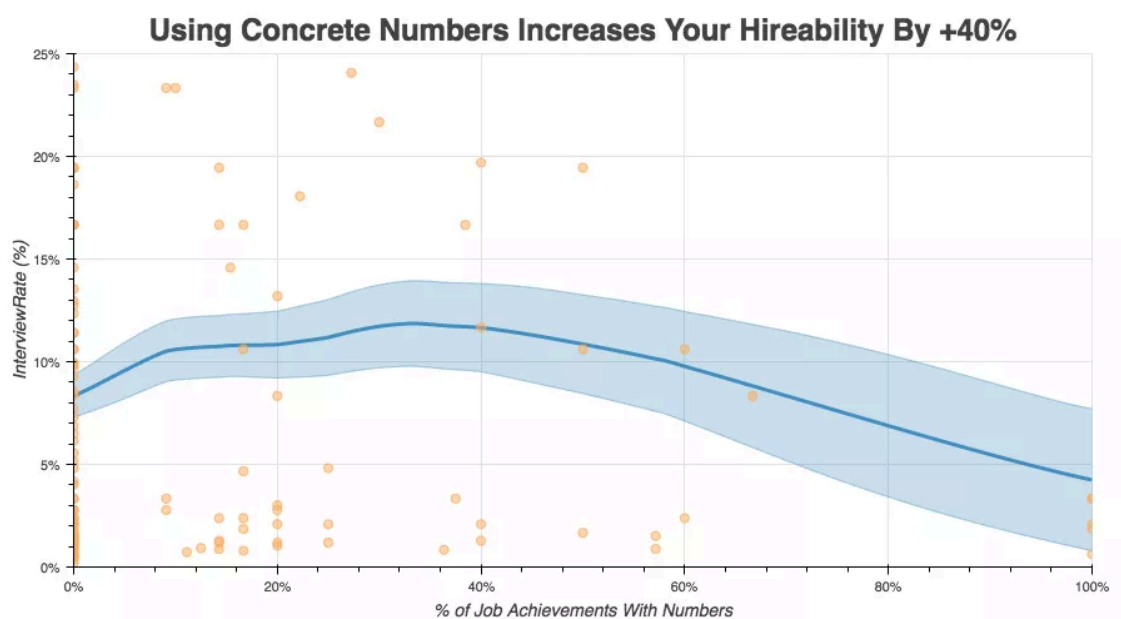
## #10: Play buzzword bingo. [+29% BOOST]



Buzzwords, keywords, acronyms, industry jargon — call them what you want, but they serve a purpose. Beyond the usual reasons, they help you get past automated screening tools used by many big companies. But if you go overboard, the actual hiring manager might think you're a tool (even if the robots don't notice).

**Resume Tip:** Name-drop a buzzword every 3-6 sentences. Folks who dropped an occasional buzzword saw a **+29.3% boost** over others.

## #9: Demonstrate results with numbers. [+40% BOOST]

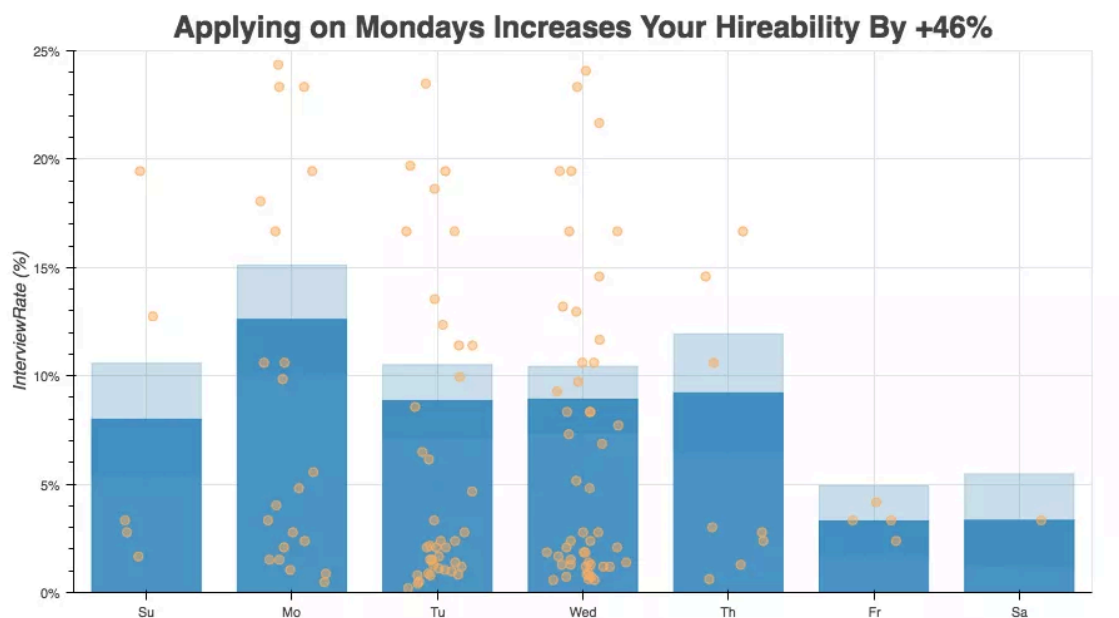


I've personally hired 100+ people over my career and, during that time, I've probably personally reviewed 10,000+ resumes. Even if a resume passes your sniff test, the hardest thing is separating what's real vs. what's pink, fluffy, sugar-y cotton-candy-coated horsecrap. Quantifying how *you* made an impact with

numbers goes a long way towards helping hiring managers tell them apart fast.

**Resume Tip:** Every 3 sentences, use at least 1 number to demonstrate your (concrete) impact. Folks who did that saw gain a **+40.2% boost** over their competition.

## #8: Apply on Mondays. Don't apply on Fridays. [+46% BOOST]



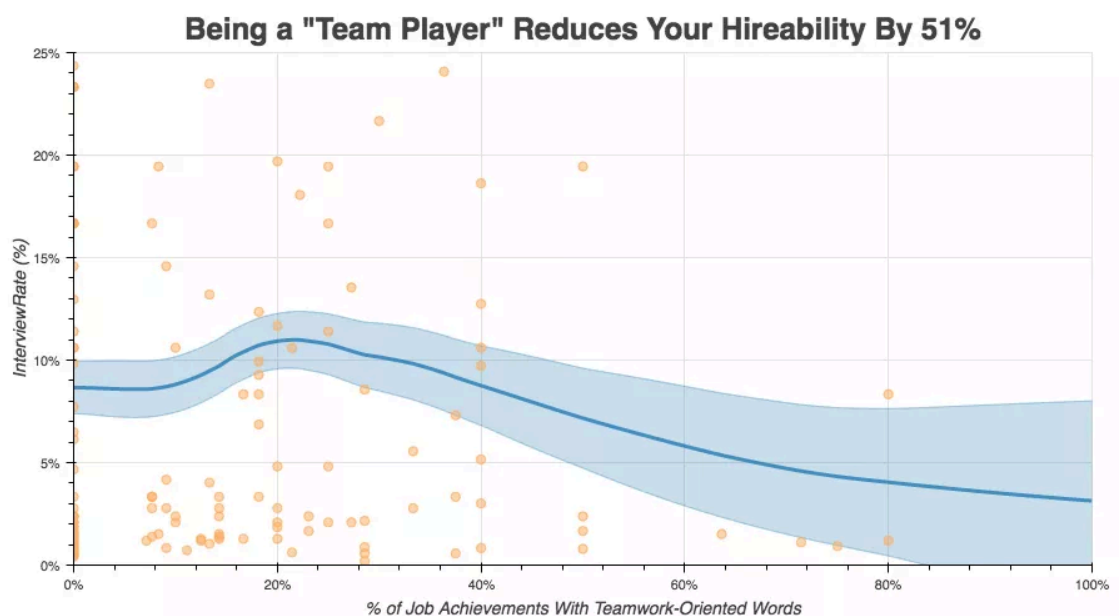
Enough said.

(Why are there so few applications on Fridays or Saturdays? **ApplicationAssistant** automatically optimizes dozens of variables for you, including when it applies for a job on your behalf.)

**Job Search Tip:** Apply on Mondays (+46.0% hireability boost). Don't apply on Fridays or Saturdays.

## #7: Don't be a "Team Player." [+51% BOOST]

This one's a little counter-intuitive, so hold on.



Everyone talks about how important teamwork is. And how our whole economy is becoming about sharing. And collaboration. Lots of it. It's very cute.

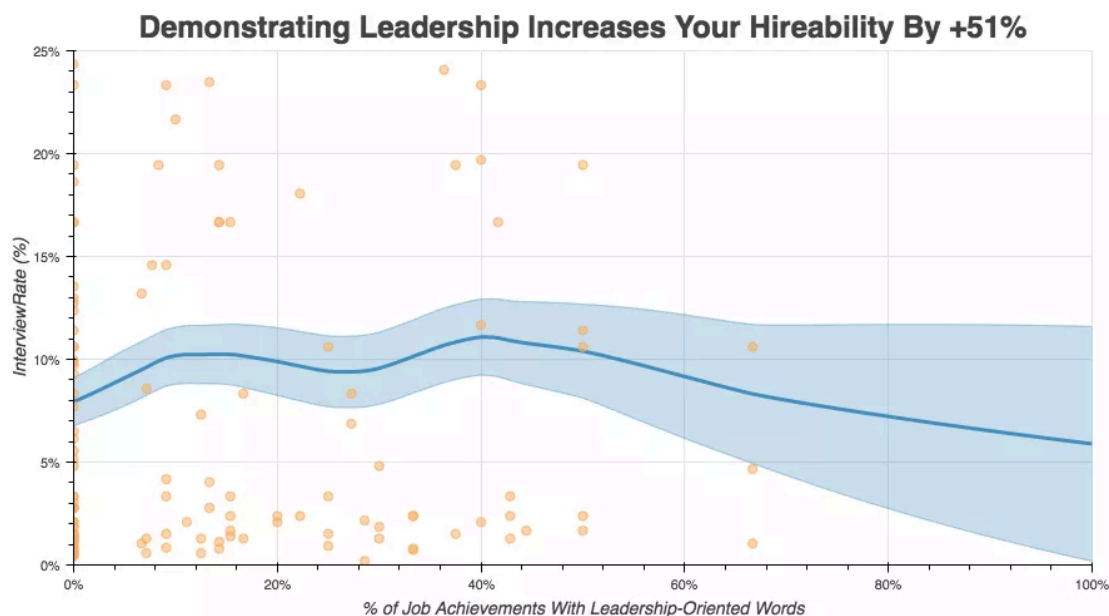
When it comes to actually *hiring* someone though, **the most collaborative candidates get penalized by -50.8% by hiring managers**. If that doesn't make sense, consider these

- “
1. Owned, analyzed and delivered on-time financial reports for business sub-unit A to management team on monthly basis.
  2. Collaborated with full analyst team to create monthly financial reports for management team.
  3. Assisted management team by creating monthly financial reports as a supporting member of the analysis team.

Who would you hire? (Or call for an interview?) In the 2nd and 3rd case, I have no idea what work *you* did (vs. free-loading off your team). Finally, many collaborative words also have passive, subordinate, weasel-word undertones.

**Resume Tip:** Don't mention more than once or twice that you're a "team player," "results-driven collaborator," "supporting member", etc. This is associated with a **+50.8% hireability boost** over the competition.

## #6: Take charge with leadership words. [+51% BOOST]



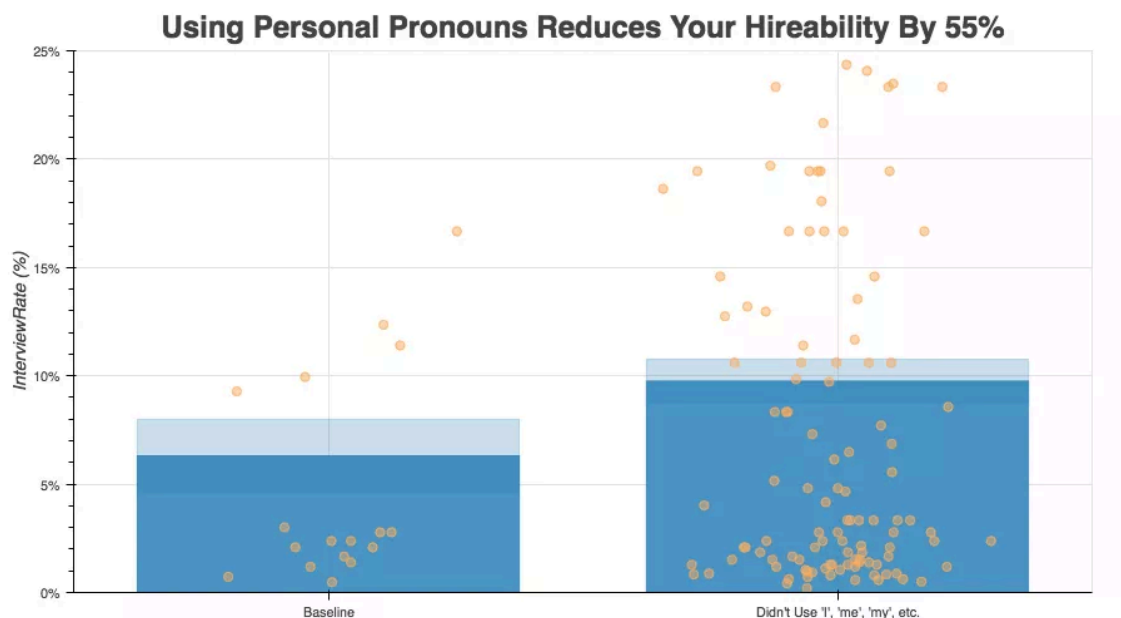
The converse of *avoiding* weasel words is also true. *Adding* strong, active, leadership-oriented words also helps you. Some of the words we detected as strong, active words:

“ communicated  
coordinated  
leadership  
managed  
organization

What I want you to get from that: **You don't have to be the CEO of your company to be a leader**, and leadership doesn't always mean managing people or huge budgets. Even if you're just an intern somewhere, you can still demonstrate leadership traits by proactively communicating with co-workers. And your future bosses want to know that!

Resume Tip: **Incorporate 1-2 leadership-oriented words every 5 sentences.** Job applicants who used strong, active, leadership-words saw a **+50.9% boost over the competition.**

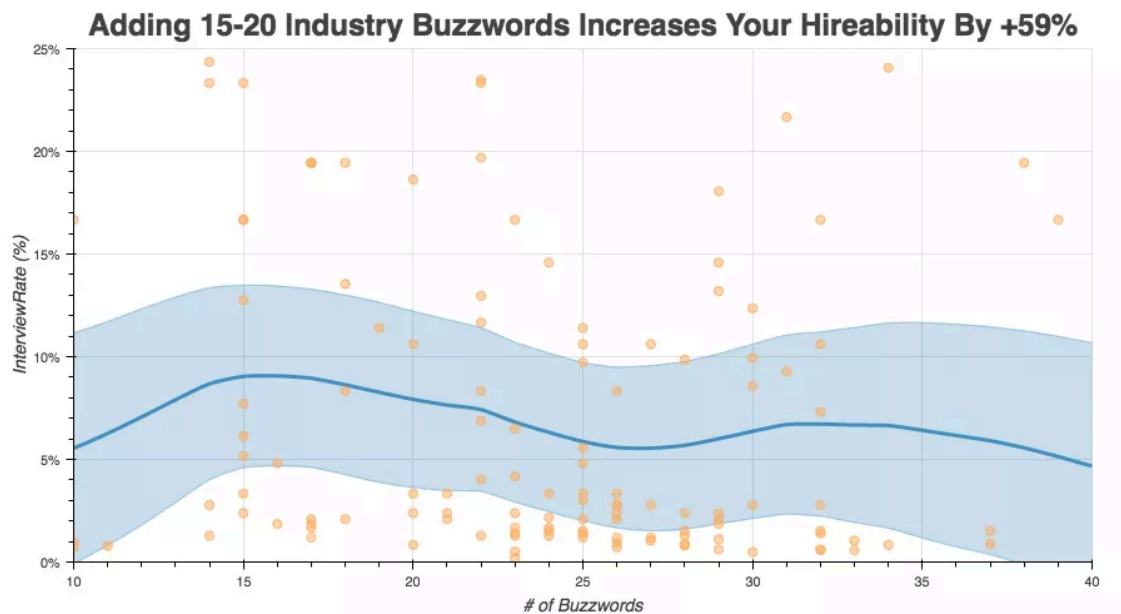
## #5: Don't use personal pronouns. [+55% BOOST]



People who used **even one personal pronoun** in their employment section (not the objective or professional summary section) had a **-54.7% lower chance of getting an interview callback.**

Resume Tip: **Don't use personal pronouns in your employment section. Ever.**

## #4: Include a Key Skills section. [+59% BOOST]



You can't name-drop enough skills, buzzwords and acronyms to get to the optimal number of skills without one.

**Resume Tip:** For *most* [\*] people, **you should add 15-20 skills, buzzwords, acronyms, etc.** to your resume. This is associated with a **+58.8% boost in hireability** on average.

[\*] There's actually a really interesting effect going on here. There's a clear, second sub-population of special folks for whom 30-40 skills, buzzwords, acronyms, etc. is the right number. More on that later.

## #3: Apply in the first 4 days. [+65% BOOST]

We've already talked about being first-in-line for a job.

**Resume Tip:** **Applying early gets you a +64.7% boost over your competition on average.** (Although it can make up to an 8x difference for a single job application, most people aren't applying at the worst possible time.)

## #2: Apply between 6am and 10am. [+89% BOOST]

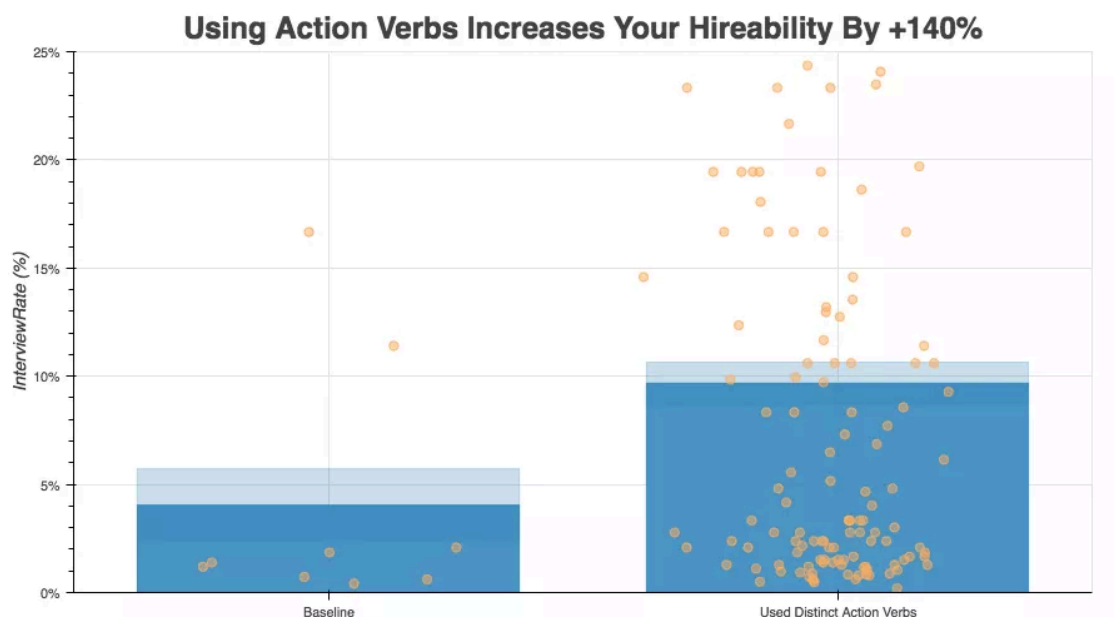
We've already talked about this too.

**Resume Tip:** **Applying between 6am and 10am gives you an +89.1% boost over your competition.** (As above, your competition isn't applying at the worst possible time so you don't get the full 5x boost every time.)

And, finally, the #1 most important factor you *can* control?



# #1: Start your sentences with (distinct) action verbs. [+140% BOOST]



If you did anything worthy at a company, you'll have done *something*. If you start the sentence describing what you did with an action verb, you're off to a strong start. And if you describe the different things that you did at that company with *different* action verbs, you'll have finished strong.

Say what? In short, say this:

“ Developed a world-positive, high-impact student loan product that didn't screw over people after 100+ customer interviews.

Not this:

“ After 100+ customer interviews, the world-positive, high-impact student loan product was developed by me.

**Resume Tip: Describe your job achievements with different action verbs.** This one resume tip is associated with **+139.6% boost in getting more interviews.**

(Why so few people in the baseline? Our **ResumeOptimizer** will automatically scan your resume and suggest places where you should use action verbs.)

## P.S. A (small) corollary —

Getting a job you deserve is hard, yes. **But, it's not as hard as you think.** And I can *prove* that.

Many folks think to get a better job they have to fundamentally change as a person, gain new skills, learn new habits, network for weeks, etc. And, sure, all of that helps.

But, look again at **the #1 most effective tip: it's about changing the words on your resume for a +139.6% boost.** (And not even all of the words — it's literally about changing the *first* word of each job achievement.)

On the other hand, **look at what a second degree buys you: a +21.9% boost.** It'll cost you tens of thousands of dollars and years of effort, but you'll get 6.4x more impact for something that'll take you a few minutes.

Why am I spending precious sentences trying to prove this to you for a blog post that's already pretty long? Because it's January 6th. And **you probably haven't made good on your New Year's Resolutions yet.** We know two things:

1. Every week you procrastinate your New Year's resolution means you have a 24% lower chance of succeeding at it.
2. The #1 most-important step to completing a task is to start it. (No, seriously. These folks have studied it.)

**So, don't procrastinate. Don't put it off.** It's not some crazy, big life improvement project to (finally) get that job you deserve. Instead, it's about making sure you apply at the right time, changing a few words, or adding a few numbers. **Go get that job you deserve today! You can do it!**

(We can help.)

## Summary

**So, to summarize:** ~~Go back to school. Be a woman. Be older. (Or younger.) Sorry, bad joke.~~ Play buzzword bingo. Demonstrate results with numbers. Apply on Mondays. (Don't apply on Fridays.) Don't be a team player. Take charge with leadership words. Don't use personal pronouns. Include a Key Skills section. Apply in the first 4 days. Apply between 6am and 10am. Start your sentences with (distinct) action verbs. (Phew! Trying saying that five times fast.)

**Easy peasy. You got this, right?** Great. Now do that for every job you have to apply to and we'll pretty much guarantee that you get the job you deserve.

Or, you can **sign up for TalentWorks** — *we'll just take care of it all for you!* (No, seriously. [\*]) Let us help you keep your New Year's Resolution.

[\*] For most things, we can just automatically take care of it for you. For instance:

- Our **AI-driven ApplicationAssistant** automatically optimizes the day of week, time of day & delay of your application so you don't have to worry about keeping track of 100+ applications.
- Our **ResumeOptimizer** will instantly scan your resume for all of the potential issues above in addition to dozens of others.

**And our A-List Talent?** Sure, some of them might be in especially high-demand fields but, more often than not, they're people **who've put in a few minutes to optimize their resume** for their job search. You should too!

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## Methodology

### Underlying Dataset

We took a random sample of 4,068 jobs, applicants and outcomes from recent activity on TalentWorks. For each case, we parsed their resumes with our ResumeParser, and annotated various applicant traits including gender, ethnicity, age, etc., and whether they had followed each of 70+ optimizations from our

ResumeOptimizer.

## Analysis

Using partial least squares decomposition against interview rate, we then identified 16 principal components from the above dataset. Finally, we hand-selected a subset of the top factors in the first two principal components as the final 13 key factors.

## Visualization

We regressed the impact and estimated standard error of each factor across its domain using a composite Matern kernel. The results above are plotted with Bokeh on python.

## Why Are We Doing This?

With ApplicationAssistant right now, we can boost the average job-seeker's hireability by ~5x. But, what makes ApplicationAssistant work has been an internal company secret until now. We're fundamentally a mission-driven company and we believe we can help *more* people by sharing our learnings. So, that's exactly what we're going to do.

## Creative Commons

We're not only sharing this but also **sharing all of it under the Creative Commons Attribution-NonCommercial-ShareAlike license**. In other words, as long as you follow a few license terms, this means you can:

- **Share:** Copy, redistribute the material in any medium or format.
- **Adapt:** Remix, transform, and build upon the material.

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*EDIT 2018-01-07 11am:* Holy batman, viral post! ~~In just 3 hours, we've been deluged by 100,000+ people~~ wanting to learn more about the science behind the job search. Trying to get to everyone's emails and comments ASAP.

*EDIT 2018-01-07 2pm:* We're 6 hours and 250,000+ people in — wow! We'll definitely be publishing a follow-up to this.

*EDIT 2018-01-10:* Since I simply couldn't keep up with everyone's comments, I wanted to address a few good technical questions that came up below and on Reddit:

- We're *not* trying to claim causation here. This was a 100% retrospective, correlation-based study. Although RCT-based studies are the gold standard and can establish correlation, they also require much more time and resources even after you know what to study. We'll definitely be spending the time and money on teasing out causation in follow-up studies, but there's still a lot of value in retrospective studies and we felt holding that back in a world where 51% of *all* 20-somethings are under-employed was just irresponsible.
- We're also *not* claiming that any one factor above fully explains the observed variance. In statistical terms, any single factor is independently a relatively weak predictor of your hireability [\*]. However, when you account for multiple factors jointly, they *are* fairly strong predictor of hireability. Put another way, *the coefficient of determination  $R^2$  of the first two principal components described above is 0.719*. For visualization simplicity above, we only graph one factor at a time.

[\*] This makes sense, right? If you're a Harvard MBA, we're not claiming that applying on Fridays means you're going to be forever unemployed.

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About the Author

### Kushal Chakrabarti

Mission-driven entrepreneur, world traveler (400K+ miles), dad to 100-pound German Shepherd. My #1 mission: To help you get the job you deserve.

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