





Good afternoon, everyone. Thank you all for being here.

Before I begin, I'd like to tell a story to set the stage. Last summer, I attended the Madison Ruby conference (an excellent conference even for non-Rubyists).



I was attending a talk entitled “What Stuttering Taught Me About Marketing” from a woman named Sharon Steed. The speaker had a **severe** stutter and talked among other things about what effect it’s had on her career. That she originally let it hold her back, but then she learned that it didn’t have to and that she could use it, to use her vulnerability, to her advantage.

No slides. Just her. Talking. Through the stutter.

I was inspired. I was motivated. But mostly I was ashamed.

About the projects I didn’t start. The people I didn’t introduce myself to. The pitches I didn’t make. The solutions I didn’t propose. The pull requests I didn’t submit.

All because I was afraid.

But this woman with a stutter was commanding the attention of a room of a few hundred with only her voice.

This led to some soul-searching, some self-assessment, and this talk, in which I explore...

# Fear & Failure

... the interrelated topics of fear and failure.

As for my credentials, I have a lot of experience in both.

So let's get started.



What am I afraid of? Lots of things.

- \* Spiders
- \* Looking foolish. Embarrassing myself.
- \* That people won't think as highly of me as I think they should.
- \* That maybe I'm not as smart as I think I am.
- \* Losing everything I've ever loved.

But there's two specific fears I want to spend a bit of time on this evening.

Afraid I'll be  
found out

I can't possibly be smart enough or skilled enough to do the work I'm doing, at the pay that I'm receiving, with the smart and talented people I'm doing it with. Eventually, they'll realize that I don't belong.

Does this sound familiar to anyone?



This fear has a name: Imposter Syndrome. It's common enough, especially at the beginning of a career or when transitioning to a new career, that it warrants special attention.

To grossly oversimplify, Imposter Syndrome occurs when you don't believe that you deserve the success you've achieved. Despite all evidence, one believes that they are a fraud or lucky or tricked people into believing that they are smarter or more competent than they truly are.

Studies have shown anywhere between 40–70% of high-achieving, successful people have experienced Imposter Syndrome at some point in their careers. Let that sink in.

Why could that be? We can't **all** be frauds, can we?

# Ignoring success

It's often hard to internalize our own successes.

"It was easy"

- \* If some task or insight came easy to me (because of the study and practice I've put in), I can trick myself into believing that it wasn't even hard to begin with. Or that it's not important.
- \* "Anybody could have figured this out."
- \* Which belies the fact that someone else *didn't*. I did. You did. You do, every day.

Some of us are modest by default. It's impolite to boast. But it's important to distinguish braggadocio from honest self-assessment.



# Idolizing heroes

On top of that, human beings, in general, (and, it often feels, the technology community especially) are very good at identifying heroes and idolizing them. Their successes and ideas become enshrined as gospel. We raise them above us, believing that mere simpletons like ourselves can't hope to achieve their level.

Which ignores their humanity and lacks respect for their struggles which are equal to mine and yours.



Gary Bernhardt, of Destroy All Software screencasts (and speaking at many conferences) fame.

I often need to remind myself that the people that I revere are just people. "I could never be as smart as Such And Such". Bullshit.

# Dunning- Kruger effect

In short, a cognitive bias in which the unskilled overestimate their ability while the highly skilled underestimate their ability. Which seems pretty counter-intuitive. But it makes some sense in a couple ways.

Once you reach a level of knowledge and skill, you become aware of just how little you know about the given topic. In the beginning you didn't realize how much effort it would take to master something, but now you do. And so, even though you now know so much more than before, if you place it in the greater context of the entire body of available knowledge you've come to discover, it can feel like you're taking a step backward.

We've all heard the adage: "The more I learn, the more I realize how much I don't know."

As you develop and grow, you begin to understand the nuances of the problems you're attempting to solve. Where you once felt so sure of yourself, you now regularly question your assumptions. And while these feel like negatives, they are in fact evidence that you're growing in skill and competence.

But there's another aspect I want to address. To quote from the paper:

"The miscalibration of the incompetent stems from an error about the self, whereas the miscalibration of the highly competent stems from an error about others" – David Dunning and Justin Kruger

The unskilled often believe that they know more than they really do; but the highly skilled often believe that others know more than they really do. So even though we have a firm grasp on what it is that we know, we get it in our heads that everyone else must know so much more. We don't see their day-

# Now what?

The simplest way to combat Imposter Syndrome is to simply understand that it exists, that many of your colleagues feel it, too, and that you *might* be smarter or better than you give yourself credit for.

When I do something awesome, I write it down. It gives me a running list of cool shit I've done which I can review from time to time, if I need a reminder.

Imposter Syndrome is something that I continue to struggle with, even today, a decade into a successful career. And that's OK, because I know many of you feel it, too, and there's a certain comfort in that.

But that's not the only fear that I feel on a regular basis...

# Afraid of failure

This is super powerful. It can often stop me from even trying.

Stick to the small potatoes. Stuff I know I can succeed with. Ignore the big problems, the hard challenges.

I'm sure I'm not alone in this regard.

# Why?

My brain, like many others' brains, is remarkably good at telling me dumb things

- \* If I do nothing new, if I keep doing what I'm doing now, I can't lose what I have.
  - \* Flawed logic. If I keep my current skills, I'll fall behind as everyone else progresses.
  - \* And anyway, if I lose it by trying something new, I didn't have a firm grasp to begin with.
- \* If I keep doing only the things I know that I can do, people won't see me struggle and fail, so they'll never have reason to think less of me.
  - \* Also flawed: If a friend or coworker struggles and fails at a hard thing, do I think less of them? No. I want to support and help them, because I want them to succeed.
  - \* The same is true of them to me or to you.
- \* Struggle is hard. I'd rather skip that, thank you.
  - \* Many of us were the "bright kids" in school.
  - \* I didn't have to try hard to pass the test. I we even did homework, it wasn't hard.
  - \* But I didn't develop the skills needed to tackle challenges until well into adulthood.
  - \* So I often fall back on old habits: I wall up, I freeze.

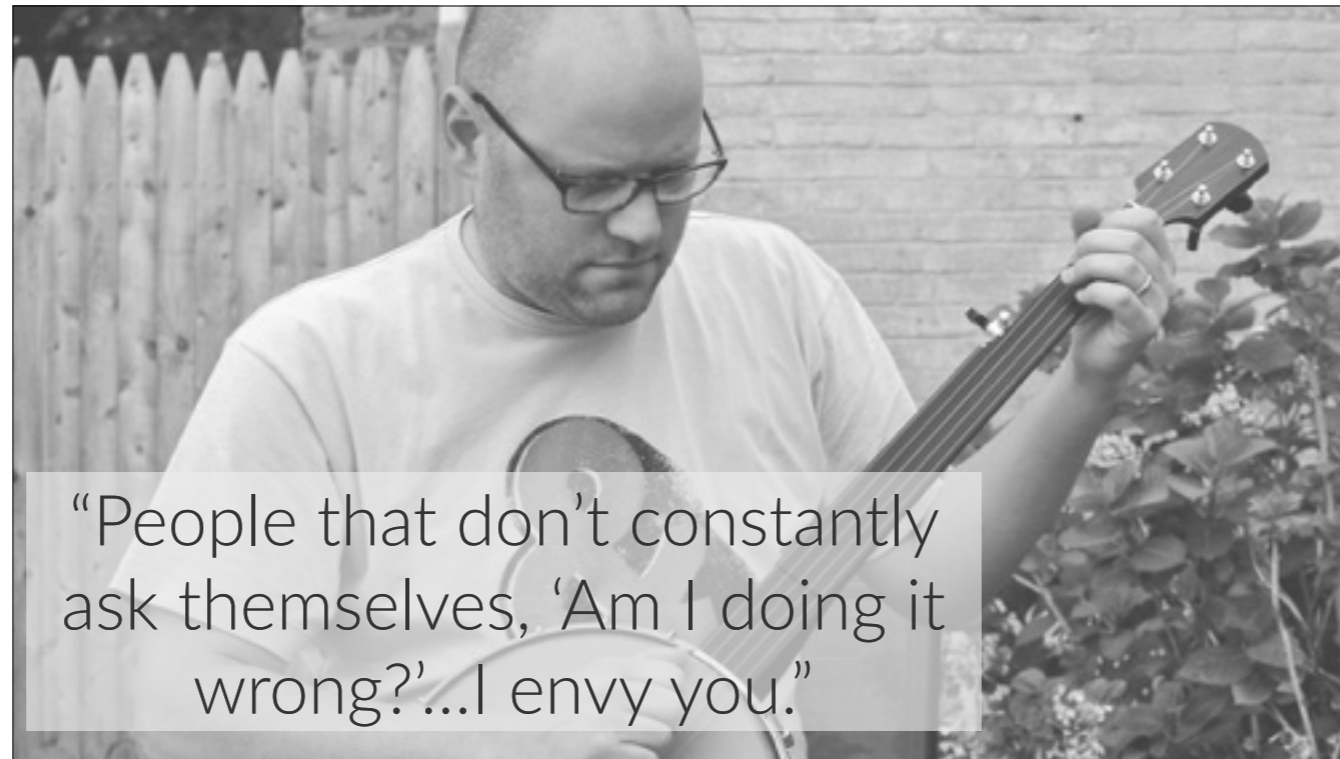
What can  
we do?

We are not  
alone

Try to diminish its crippling effects in the realization that it's normal and common

Everyone feels the fear. Your friends, your loved ones, your coworkers, your boss, your heroes. They all feel it.





Dan Cederholm: my boss, author of 5 books, CSS expert, world-traveling speaker, cofounder of Dribbble (the world's most awesome social network), banjo player.

Despite all his successes, he has doubts. Why should I be surprised that I do, too?

When I think to myself that I'll apply for that awesome job when I'm ready, or I'll start that project once I've learned that one more skill, or I'll pitch my boss on this idea after I've practiced a bit more, or I'll introduce myself to that person the next time I see them at this conference when I feel more confident: I need to stop letting the doubt win. The doubt will **never** go away.

Another way to battle the fear is...

# Embrace it

- \* Embrace your fear
  - \* Push ourselves
  - \* Believe in ourselves
  - \* Desensitize ourselves to fear's effects by repeated exposure, which is its own reward

Because we frequently succeed.

But, understand that we **will** often fail

Which leads us to our next topic...



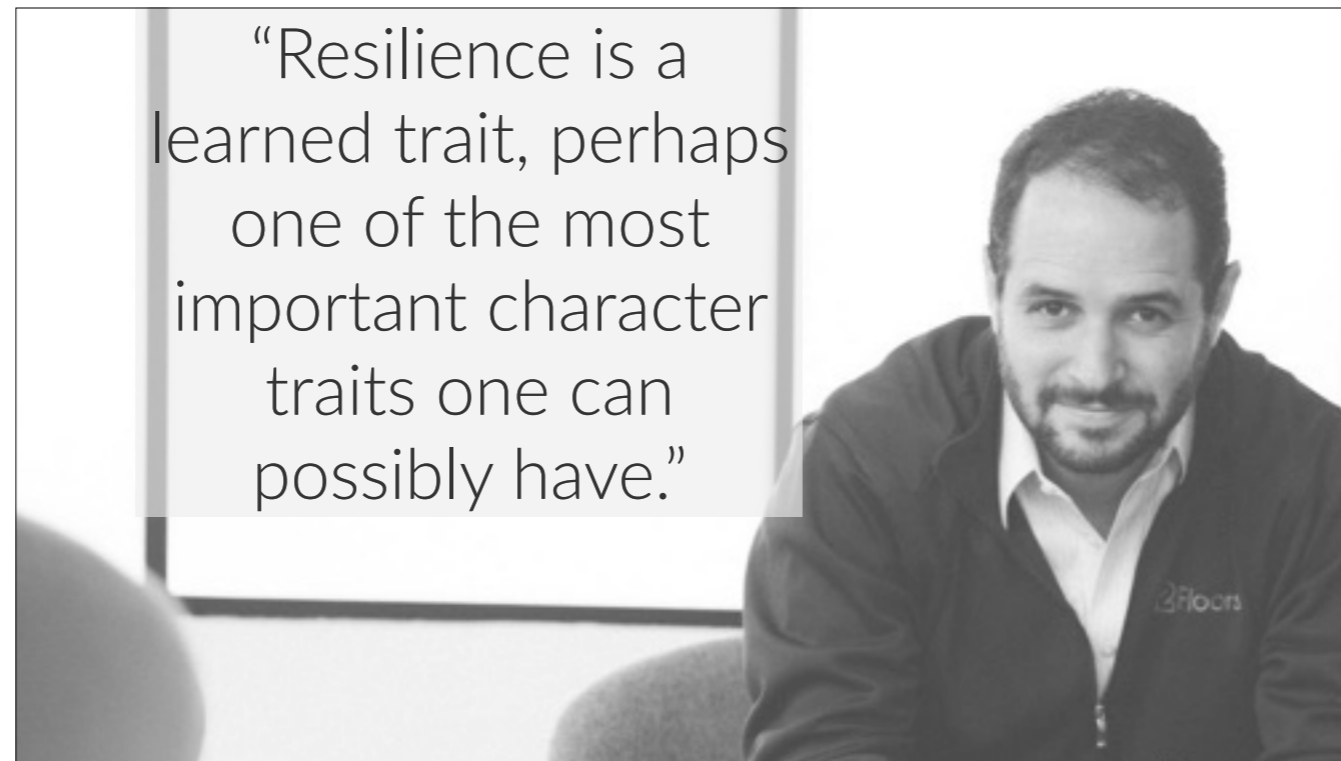
Please allow me to repeat myself: I. Will. Fail.

I'll fail at something, some time. Probably many things. It's one of life's fun little guarantees.

Embrace it

For the same reasons I just told you to embrace fear, embrace failure.

It's going to happen whether you want it to or not. By running headlong into failure, you learn resilience.



Jason Freedman from 42floors

<http://blog.42floors.com/imposter-syndrome/>

He wrote that when people are intimidated by the work in front of them, some respond with an innate resilience, to buckle down and get it done. For others, it's not their natural reaction. My reaction is to back down or give up. But by forcing myself to persevere, I get a little better every time. I don't always succeed, but in trying, it gets a little easier next time.

# Permission to fail

As the Mythbusters say, "Failure is **always** an option."

Failure isn't a goal, but it can be quite valuable. You can learn **so much** from failure, if you're paying attention.

After outages or other major problems at work, we perform a (frequently brief) post-mortem:

- \* What happened?
- \* What was the solution?
- \* What went well?
  - \* Honor the things that we're doing correctly.
- \* What didn't go well?
  - \* Recognize that we're not perfect.
- \* What's the follow up?
  - \* Better documentation?
  - \* Better monitoring?
  - \* Better tools?

# Just culture

Which is influenced by reading about what they call “just culture” at Etsy, the foundation of which are blameless post-mortems. Rather than identifying some single root cause, the person or people who screwed up, and punishing them, attempt to identify which parts of the system were insufficient (lack of training, lack of monitoring, lack of tests). Focus on fixing *those* and you end up with a better system, independent of any particular person.

This stems from the assumption that failures in complex systems are systemic rather than having a single identifiable cause. It was the confluence of these 5 things that all went wrong at once which pushed things over the edge and brought down the platform or caused poor performance. Pointing to one person and blaming them for a shitty deploy solves none of that. Improving your tooling and your process and your communication, as an organization, will.

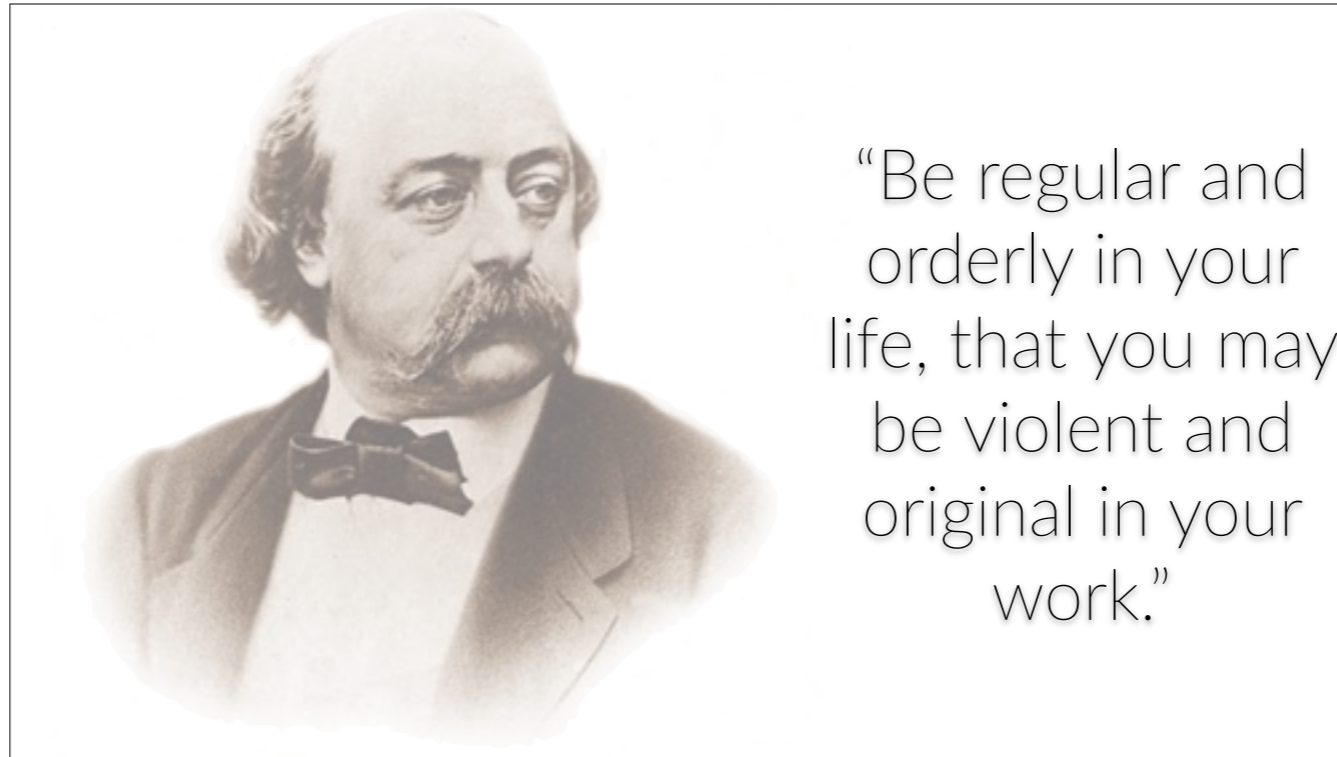
And by removing the concept of blame, of scapegoating, of finger-pointing, from the post-mortem, everyone is free to be honest without fear of reprisal.

# Fail well

If we're going to fail anyway, we might as well practice failing well. Make it easier on ourselves.

- \* Try a small thing to fail with
- \* If I succeed, hooray! I can build on that thing or try something a little bigger, a little riskier.
- \* If I fail, hooray! I failed at something small, so who gives a shit? Try a new thing!





This little ditty from French author Gustave Flaubert (pictured left) has been rattling around my brain for over a decade.

One part of failing well is failing in as few places at a time as you can. Easier to fail well from a stable foundation. Easier to try a new job if your life at home is going smoothly. Easier to take the risk of starting your own business if you have money set aside.

Pick the thing that you want to take your risks on.

Worse is  
better

A concept originally from the Lisp community in the late 80's, suggesting:

- \* **Simplicity** is the most important thing
- \* Followed by **correctness**
- \* And then **consistency**
- \* And all the way in last place: **completeness**

Easy to miss the point. Not worse quality, but that in doing fewer things you can do them better. Simplicity and correctness are more important than completeness.

As developers, this can come as a shock. Many of us value correctness or even completeness as paramount, **dooming us to a big, bad kind of failure**. Whereas if we start with simplicity, we fail in small, manageable increments until we reach correctness, moving from top to bottom, perhaps never reaching completeness unless strictly necessary. This is a good kind of failure.

# Succeeded by failing

- \* Game Neverending (by Ludicorp, browser-based MMO, never launched) -> Flickr (2004)
  - \* Couldn't get the game quite right, so they took one of the features of the game, sharing pictures, and turned it into Flickr
- \* Odeo (by Obvious Corp, podcasting service in 2005) -> Twitter (2006)
  - \* They couldn't get the product to work as a business, so they went with their second idea: Twitter.

If our idea isn't working, it's not because we're bad thinkers or bad developers or bad people. Frequently, we have other ideas that we're ignoring while we focus on this failure. Maybe one of your second ideas is your success.

# Fear & Failure

These fears are very real, and I feel them regularly.

- \* Less an less than I used to.
- \* And hopefully you'll feel them less, too.

If you take away nothing else from me talking to you tonight, I want you to give yourselves permission to fail well. It's by this struggle and this failure that we continue to grow, be it as developers or friends, or human beings.

If Sharon Steed can stand on stage, stuttering, in front of a room of hundreds and tell us about how she's conquered the problems that life placed before her, what do you think that each of us could accomplish?



Thank you for your time and attention.