

# Practicing to be Perfect

Practicing to be ~~Perfect~~  
Better



## Speaker notes

Jan 2018 - Missile alert in Hawaii

Wasn't corrected for 38 minutes

<https://arstechnica.com/information-technology/2018/01/the-interface-to-send-out-a-missile-alert-in-hawaii-is-as-expected-quite-bad/>

# 1896





# 2016



## Speaker notes

[https://en.wikipedia.org/wiki/Athletics\\_at\\_the\\_1896\\_Summer\\_Olympics\\_%E2%80%93\\_Men%27s\\_marathon](https://en.wikipedia.org/wiki/Athletics_at_the_1896_Summer_Olympics_%E2%80%93_Men%27s_marathon)

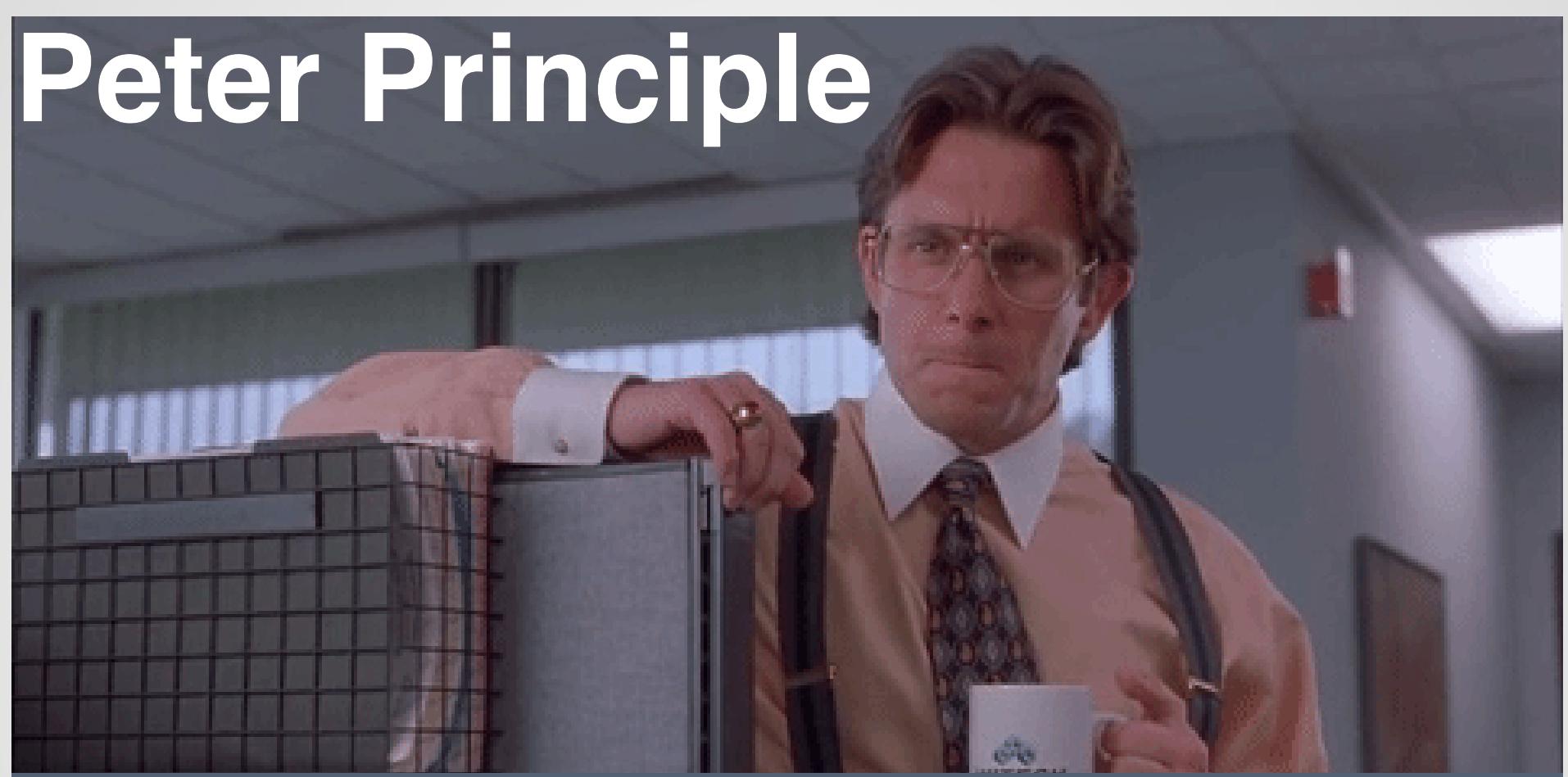
1st place time was 2:58.

In 2016, it was 2:08.

[https://en.wikipedia.org/wiki/Athletics\\_at\\_the\\_2016\\_Summer\\_Olympics\\_%E2%80%93\\_Men%27s\\_marathon](https://en.wikipedia.org/wiki/Athletics_at_the_2016_Summer_Olympics_%E2%80%93_Men%27s_marathon)

Colfax marathon in May the top woman would have won the gold medal 120 years ago.

# Peter Principle



*“Everyone in an organization keeps on getting promoted until they reach their level of incompetence.*

## Speaker notes

Laurence J. Peter - Peter Principle - a satirical book from 1969, but a classic "honesty in comedy" example

<https://hbr.org/2014/12/overcoming-the-peter-principle>

"Everyone in an organization keeps on getting promoted until they reach their level of incompetence."

INTEL® CORE™ i5  
i5-8600K  
SR3QU 3.60GHz  
L736C344 ©

## Speaker notes

<https://meltdownattack.com/>

Spectre and Meltdown - bugs in CPUs that "allow programs to steal data which is currently processed on the computer. While programs are typically not permitted to read data from other programs, a malicious program can exploit Meltdown and Spectre to get hold of secrets stored in the memory of other running programs."



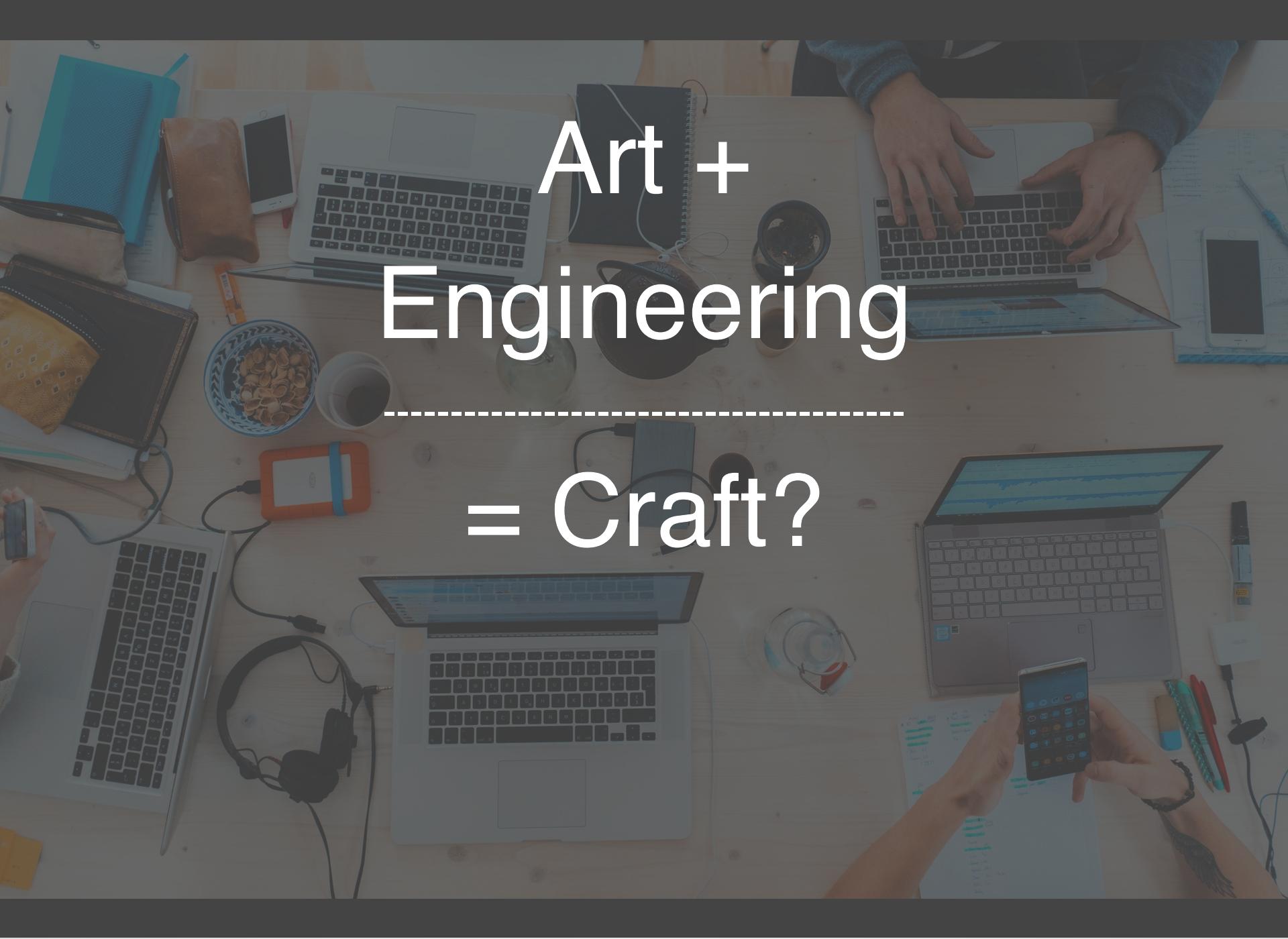
[danluu/post-mortems](#)

*“there are a handful of postmortem patterns that I keep seeing over and over again”*

## Speaker notes

<http://danluu.com/postmortem-lessons/>

I haven't done any kind of formal analysis on the most common causes of bad failures (yet), but there are a handful of postmortem patterns that I keep seeing over and over again.



Art +  
Engineering

---

= Craft?

## Speaker notes

So what are we? Craftspeople? Engineers? Artists?

Artists practice...a lot. Chad Fowler, Code Retreat is where I first heard the idea of practicing writing code

<http://chadfowler.com>



Mrs. Fawzia Y. Aden

Mr. Abdigani A. Jama

Mr. Aden

## Speaker notes

<http://chadfowler.com/2011/12/27/the-art-craft-commodity-continuum.textile>

When you create software, someone somewhere wants it to perform a set of functions and has a stake in how well those functions are implemented. The definition of "well" is up to the stakeholder.



## Speaker notes

We're paid for how well our software performs. Is the act of writing software a performance? If so - when do we practice?



# talent

## Speaker notes

Denver hosts the Denver Startup Week and there's a number of events. I attended one with engineering leaders from Slack, Strava, thetradedesk and gusto and almost of all them discussed "talent" as a reason for moving business to Denver.



## Speaker notes

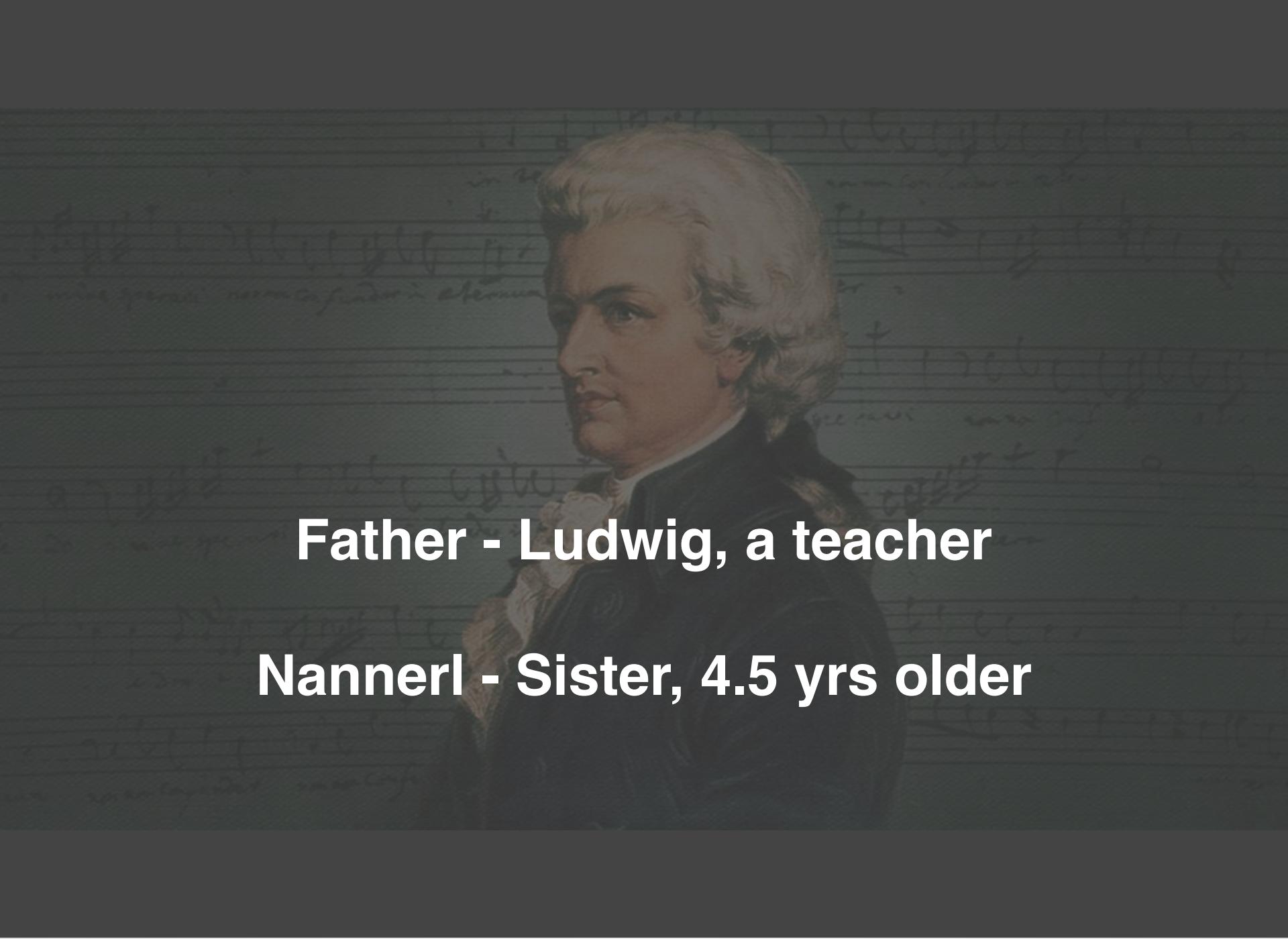
How do other careers and fields of expertise practice? Or are they just full of talented people?

<http://mentalfloss.com/article/547532/facts-about-wolfgang-amadeus-mozart>

At age 7, he toured as a child and showed off "perfect pitch" - ability to listen to a sound (bell, chime, instrument) and specify the note/key.

"ability to identify any note played on any instrument at any time"

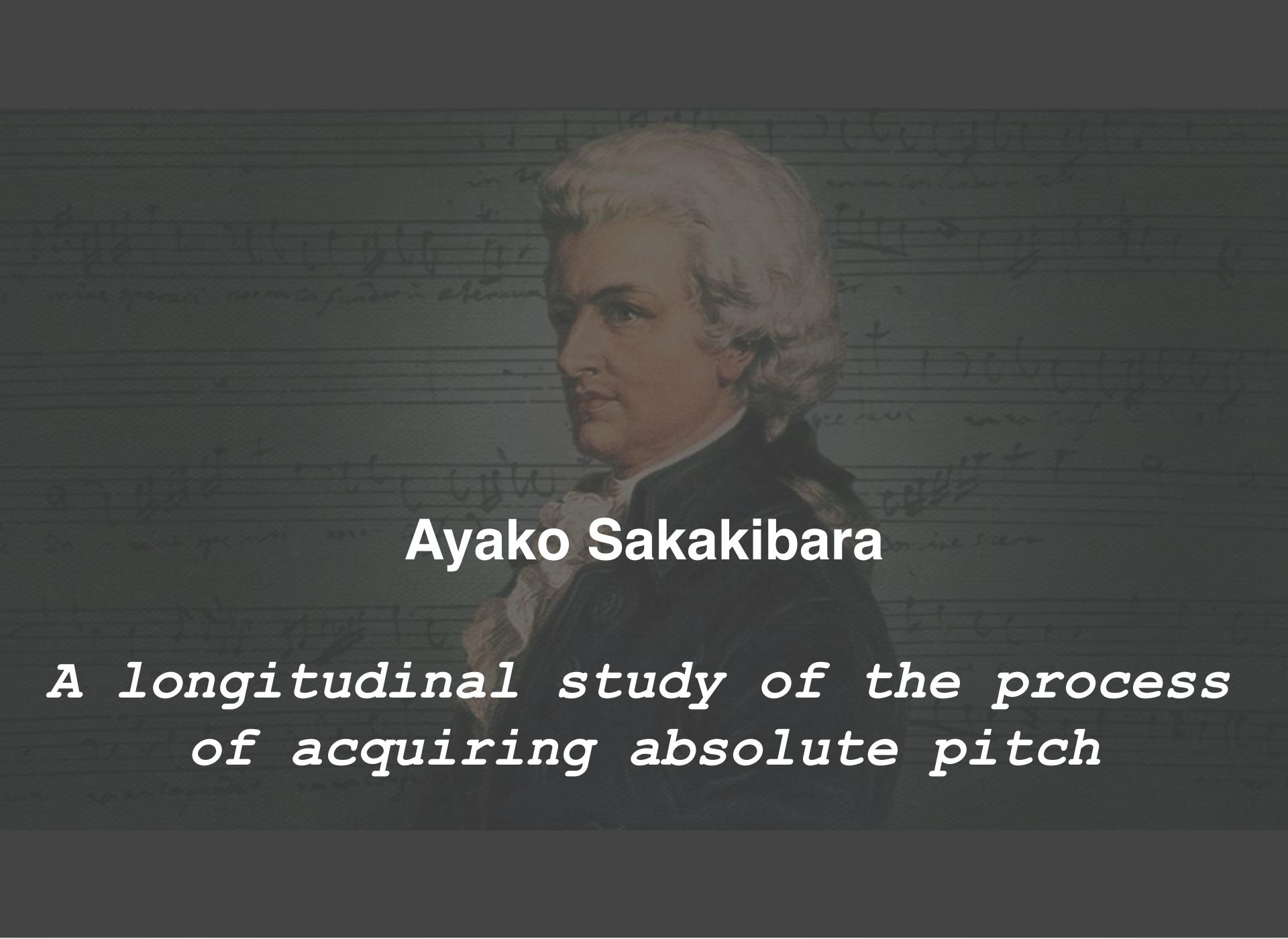
Thought that 1 in 10000 have this ability.



**Father - Ludwig, a teacher**

**Nannerl - Sister, 4.5 yrs older**

## Speaker notes

A portrait of Ludwig van Beethoven in profile, facing left, set against a background of handwritten musical notation on five-line staves.

# Ayako Sakakibara

*A longitudinal study of the process  
of acquiring absolute pitch*

## Speaker notes

Sakakibara - study in 2012 Twenty-four young children (aged 2 to 6 years) without AP were trained to acquire AP using Eguchi's (1991) Chord Identification Method (CIM). All children were able to acquire AP (except two who ceased training).

Peak: A. Ericsson

<https://qz.com/915646/how-to-make-your-kid-good-at-anything-according-to-anders-ericsson-an-expert-on-peak-performance-and-originator-of-the-10000-hour-rule/>

<http://journals.sagepub.com/doi/abs/10.1177/0305735612463948>



## Speaker notes

US Women's Soccer team - 6 years as #1 ranked team in the world

<https://www.washingtonpost.com/news/early-lead/wp/2014/12/19/u-s-womens-soccer-team-drops-to-no-2-in-fifa-rankings-for-first-time-since-2008/>

M

# USA Women Soccer Team Practice



Watch later Share

Speaker notes

US Women's Soccer practice - <https://youtu.be/K48v4DIGns8>

Notice how mundane the drill at 2:00 is



VANILLACTS

*“ From the beginning of January to  
the end of February, I threw over  
10,000 spirals*

## Speaker notes

Steve Young, 49ers quarterback (source from Grit - A. Duckworth)

Wanted to quit the team at BYU. He was on the hamburger squad - instead he stuck with it, spending a summer throwing over 10K passes through the upright field goal to improve.



Speaker notes

Chris Rock - Madison Square Garden performance in 2007

18 😂



## Speaker notes

Prepped for a New Years Eve appearance at Madison Square Garden

"You got to realize, I've been working on my act probably since around April, March," he said, sitting in an office he keeps on the Upper West Side. "I am ready."

Mr. Rock does not believe all that success comes with him when he takes the stage. For him the 18 warm-up shows he did at the Stress Factory in New Brunswick, N.J., preparing for the tour are a lot more important than his three Emmys.

<https://www.nytimes.com/2007/12/28/arts/television/28rock.html> & Talent is Overrated



## Speaker notes

3 months of practice for a 6 minute session on Johnny Carson

(Dangerfield had a failed career as a comedian, then as a paint and vinyl siding salesperson, before getting back into comedy)

<https://www.nytimes.com/2018/01/26/magazine/letter-of-recommendation-rodney-dangerfield.html>

MAINZ 2008

# Laszlo & Klara Polga



MAINZ 2008

# Laszlo & Klara Polga



"early and intensive  
specialization in a  
particular subject"

## Speaker notes

<https://www.psychologytoday.com/us/articles/200507/the-grandmaster-experiment>

Forty years ago, Laszlo Polgar, a Hungarian psychologist, conducted an epistolary courtship with a Ukrainian foreign language teacher named Klara. His letters to her weren't filled with reflections on her cherubic beauty or vows of eternal love. Instead, they detailed a pedagogical experiment he was bent on carrying out with his future progeny. After studying the biographies of hundreds of great intellectuals, he had identified a common theme—early and intensive specialization in a particular subject. Laszlo thought the public school system could be relied upon to produce mediocre minds. In contrast, he believed he could turn any healthy child into a prodigy. He had already published a book on the subject, *Bring Up Genius!*, and he needed a wife willing to jump on board."

CHES960  
RAPID WORLD C  
MAINZ 2008

ELL  
TMBISTER



inz

Chess Classic Mainz

## Speaker notes

Judit Polgar - [https://en.wikipedia.org/wiki/Judit\\_Polgár](https://en.wikipedia.org/wiki/Judit_Polgár)

By Stefan64 - Self-photographed, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=4493949>

When she was 9 she beat 5 players in chess. While blindfolded.

Generally considered the strongest female chess player of all time.

# The Role of Deliberate Practice in the Acquisition of Expert Performance

K. Anders Ericsson, Ralf Th. Krampe, and Clemens Tesch-Römer

*Many characteristics once believed to reflect innate talent are actually the result of intense practice extended for a minimum of 10 years.*

## Speaker notes

"Many characteristics once believed to reflect innate talent are actually the result of intense practice extended for a minimum of 10 years."

<https://qz.com/915646/how-to-make-your-kid-good-at-anything-according-to-anders-ericsson-an-expert-on-peak-performance-and-originator-of-the-10000-hour-rule/>

# Deliberate Practice

# PEAK

SECRETS FROM  
THE NEW SCIENCE  
OF EXPERTISE

Anders Ericsson

*and* Robert Pool

"[Peak] offers an optimistic anti-determinism that ought to influence how people educate children, manage employees, and spend their time. The good news is that to excel one need only look within." —THE ECONOMIST

1. Develop skills others  
have figured out how to  
do (with a coach)

## Speaker notes

Peak - K.A. Ericsson

P. 99

Deliberate practice develops skills that other people have already figured out how to do and for which effective training techniques have been established. The practice regimen should be designed and overseen by a teacher or coach who is familiar with the abilities of expert performers and with how those abilities can best be developed.

2. Practice outside  
one's comfort zone and  
constantly try things  
that are beyond her  
current abilities

## Speaker notes

Peak

p. 99

Deliberate practice takes place outside one's comfort zone and requires a student to constantly try things that are just beyond his or her current abilities. Thus it demands near-maximal effort, which is generally not enjoyable

## 2. "generally not enjoyable"



3. Well-defined, specific goals to improve target performance (with a set of small changes developed by a coach)

## Speaker notes

### Peak

p. 99

Deliberate practice involves well-defined, specific goals and often involves improving some aspect of the target performance; it is not aimed at some vague overall improvement. Once an overall goal has been set, a teacher or coach will develop a plan for making a series of small changes that will add up to the desired larger change.

Improving some aspect of the target performance allows a performer to see that her performances have been improved by the training.

4. Deliberate; requires  
full attention and  
conscious actions

## Speaker notes

Peak

p. 99

Deliberate practice is deliberate, that is, it requires a person's full attention and conscious actions. It isn't enough to simply follow a teacher's or coach's directions. The student must concentrate on the specific goal for his or her practice activity so that adjustments can be made to control practice.

5. Feedback and  
modification of efforts in  
response to that  
feedback.

## Speaker notes

Peak

p. 99

Deliberate practice involves feedback and modifications of efforts in response to that feedback. Early in the training process much of the feedback will come from the teacher or coach, who will monitor progress, point out problems, and offer ways to address those problems. With time and experience students must learn to monitor themselves, spot mistakes, and adjust accordingly. Such self-monitoring requires effective mental representations

6. Produces and  
depends on effective  
mental representations

## Speaker notes

### Peak

p. 99-100

Deliberate practice both produces and depends on effective mental representations. Improving performance goes hand in hand with improving mental representations; as one's performance improves, the representations become more detailed and effective, in turn making it possible to improve even more. Mental representations make it possible to monitor how one is doing, both in practice and in actual performance. They show the right way to do something and allow one to notice when doing something wrong and to correct it.

7. Focus on particular aspects of skills and work to improve them specifically

## Speaker notes

Peak

p. 99

Deliberate practice nearly always involves building or modifying previously acquired skills by focusing on particular aspects of those skills and working to improve them specifically; over time this step-by-step improvement will eventually lead to expert performance. Because of the way that new skills are built on top of existing skills, it is important for teachers to provide beginners with the correct fundamental skills in order to minimize the chances that the student will have to relearn those fundamental skills later when at a more advanced level.

# Mental Representations

## Speaker notes

Idea of mental representations or "chunks" - a way for us to store information as we learn it.  
Sherlock's "mind castle" is one example.



## Speaker notes

Dutch researcher A. D. De Groot (1946 but not translated until 1965) and then WG Chase and H.A. Simon  
“Perception in Chess” 1973

Study of chess players and remembering random positions

Study of highly skilled chess players as well as non players where they were shown chessboards with 20-25 pieces set up as they were in actual games. Research subjects were shown the boards only briefly - 5-10 seconds - and asked to recall the position of the pieces. The results were what you expect - chess masters could recall the position of every piece, while non-players could place only 4-5 pieces. Then researchers replayed the procedure, this time with pieces positioned not as in actual games but randomly. Non players could again get only 4-5, but the masters did barely any better - 6-7 pieces. Chess masters did not have incredible memories, they had incredible ability to remember real chess positions.

# Actual Game Positions

Experts: 20+  
pieces

Novices: 4-5  
pieces

## Speaker notes

With chess boards set to "normal", experts showed a big advantage.



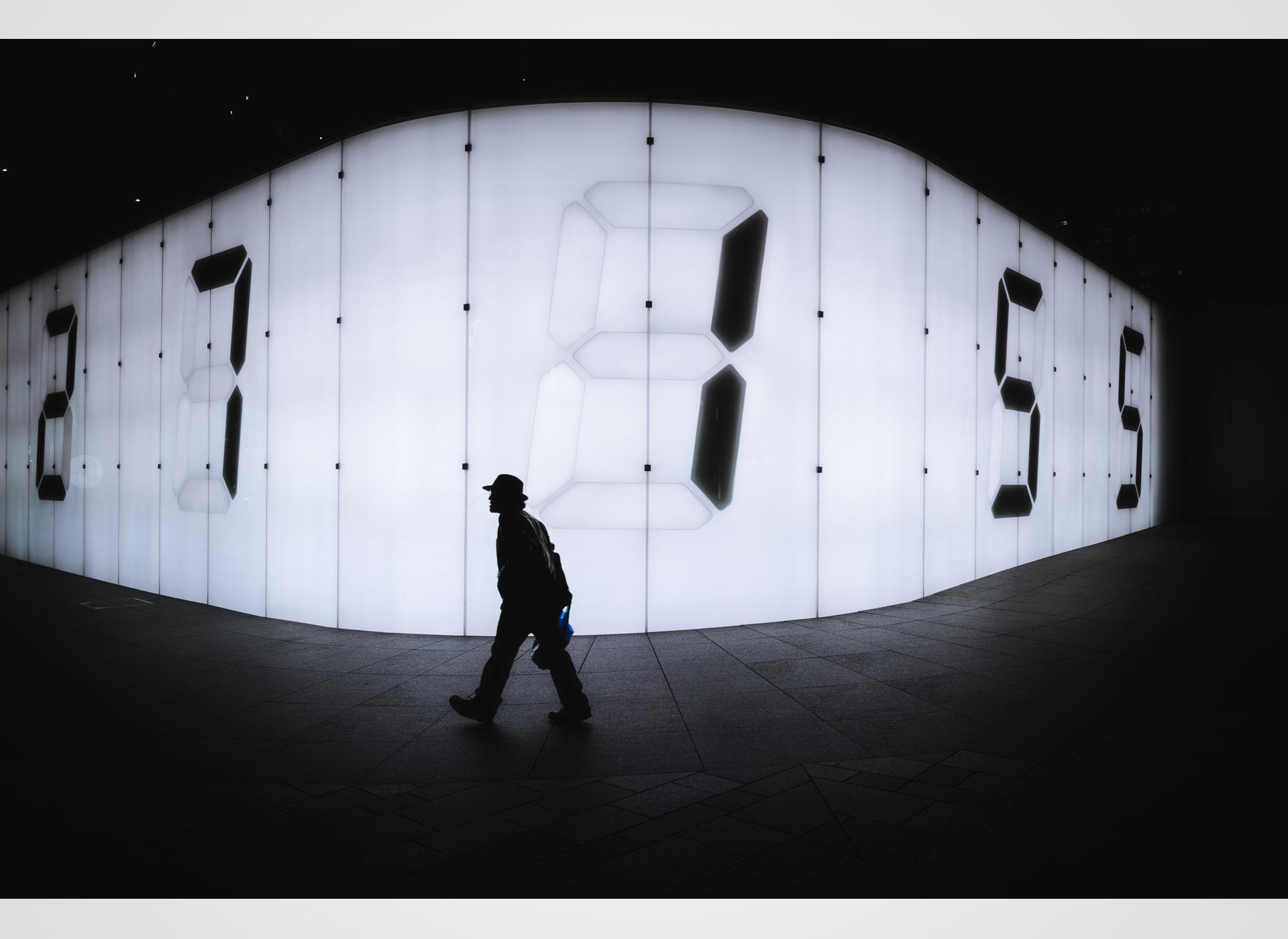
Random  
Experts: 6-7  
pieces

Novices: 4-5  
pieces

## Speaker notes

But when randomized, the results got closer.

Ben Franklin - poor chess player



## Speaker notes

<http://nautil.us/issue/35/boundaries/not-all-practice-makes-perfect>

1980 Study at Carnegie Mellon

Subjects would memorize random strings of numbers - "Seven ... Four ... Zero ... one"

After 4 hour long sessions, Steve could remember 7 and that was it.



Avg: 7-8

Avg: 7-8

After 200 training sessions,  
he had reached 82 digits



COPR. DETROIT PUBLISHING CO.

## Speaker notes

### Ben Franklin learns to write

Exchange of letters with John Collins, arguing whether women should be educated, Collins contending they were naturally unable to learn as much as men, Franklin taking the other side

Franklin's father said his letters were inferior "in elegance of expression in method and in perspicuity, of which he convinced me by several instances".

So, Franklin:

- \* Found materials better than his - Spectator the great English periodical
  - \* Overall - Would read Spectator article, make brief notes on the meaning of each sentence in his own words and then compared his essay with the original -and then corrected faults
  - \* Vocabulary - Then he would rewrite Spectator essays in verse, take the essays and rewrite them in prose, again comparing his efforts with the original
  - \* Organization - He would make short notes on each sentence in an essay, but would write each note on a separate slip of paper - then mix up the notes and put them aside for weeks until he had forgotten the essay, then try to put them back in order, attempt to rewrite the essay and compare it to the original
- > Significantly, he did not try to become a better essay writer by sitting down and writing essays. Instead, like a top-ranked athlete or musician, he worked over and over on those specific aspects that needed improvement.

10<sup>th</sup> ANNIVERSARY EDITION  
REVISED AND UPDATED

# Talent Is Overrated

*What Really Separates World-Class  
Performers from Everybody Else*



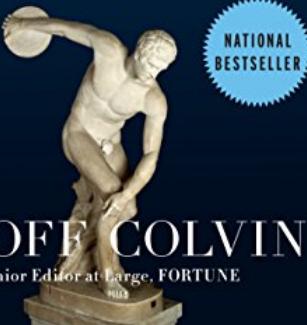
## Speaker notes

Colvin has a summary of Deliberate Practice (also the book where I found much of this content)

10<sup>th</sup> ANNIVERSARY EDITION  
REVISED AND UPDATED

# Talent Is Overrated

What Really Separates World-Class  
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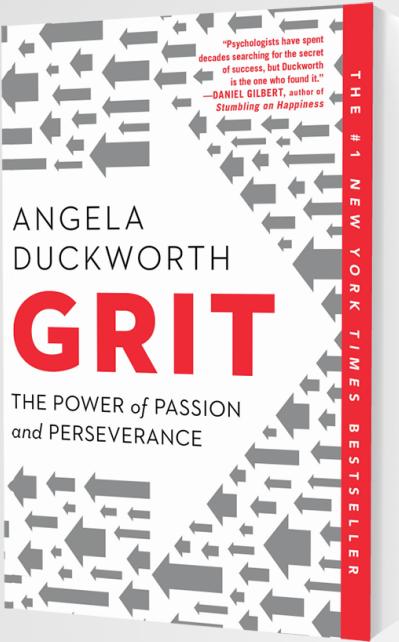
GEOFF COLVIN

Senior Editor at Large, FORTUNE

- Designed specifically to improve performance
- Can be repeated a lot
- Feedback is continuously available
- Highly demanding mentally
- Not much fun

## Speaker notes

(Moe Norman, golfer in 50s-70s who could hit straight shots - 800 balls a day, five days a week)



*“ You need to break down big goals into smaller and smaller parts, and then you need to give them the part that they’re almost able to do, and with support can do.*

## Speaker notes

Grit - combo of passion and performance - is needed to break through the difficult moments.  
And one way to make the approach easier is to have small goals that you can obtain that then put you on the path to a larger goal.

<https://qz.com/work/1233940/angela-duckworth-explains-grit-is-the-key-to-success-and-self-confidence/>



## Speaker notes

We just went over a lot of info. Break and/or time for questions.

# Deliberate Practice: Individual



## Speaker notes

You might have to practice on your own. What are some tools to do so?

# Kata

<http://codekata.com/>

<https://www.codewars.com/>

- ✓ Can be repeated a lot
- ✓ Feedback is continuously available

## Speaker notes

Katas and the like are great b/c you can repeat them (try in a new lang, try w/ a diff approach) and it's quick to get feedback.

Some notion of coaching and mentoring.

# CodeWars

## 7kyu Disemvowel Trolls

☆ 410 🏆 53 🌐 86% of 5,101 ⚙ 19,735 of 43,959 🎙 osuushi ⚡ 3 Issues Reported

Instructions Output

Trolls are attacking your comment section!

A common way to deal with this situation is to remove all of the vowels from the trolls' comments, neutralizing the threat.

Your task is to write a function that takes a string and return a new string with all vowels removed.

For example, the string "This website is for losers LOL!" would become "Ths wbst s fr lsrs LL!".

Note: for this kata `y` isn't considered a vowel.

FUNDAMENTALS STRINGS REGULAR EXPRESSIONS DECLARATIVE PROGRAMMING

ADVANCED LANGUAGE FEATURES

powered by Qualified

JavaScript

Node v8.1.3



VIM EMACS



Solution:

```
1 ▾ function disemvowel(str) {  
2     return str;  
3 }
```

Sample Tests:

```
1 Test.assertEquals(disemvowel("This website is for losers LOL!"),  
2                   "Ths wbst s fr lsrs LL!")
```



# Mentor(ing)

<https://exercism.io/>



Develop skills others have  
figured out how to do (with a  
coach)

## Speaker notes

Exercism (or a similar mentoring approach) can help with getting coaching.

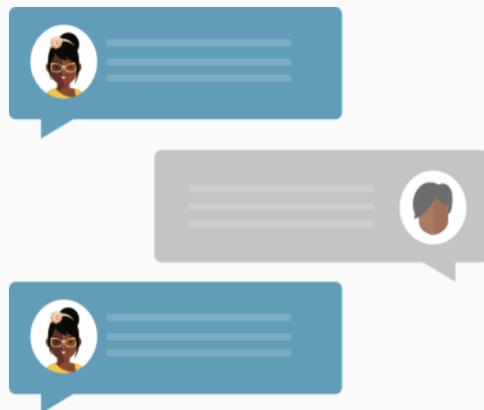
Can be hard to get feedback (mentors are busy or nonexistent); also not much fun at times.

# Mentor(ing)

<https://exercism.io/>

## *What **mentors** do to help*

Mentors are at the core of Exercism. Let's see how they're involved.



A student joins a language track and submits their solution to a coding challenge.

A Mentor gives feedback and guides the student to a more idiomatic solution, helping them become more fluent in a new language.

With their mentors help, people complete all the challenges on their track and achieve fluency in a new language.

# Other

Code Review / PRs

#100DaysOfCode

CodePen / CodeSandbox / Repl.it

 Develop skills others have figured out how to do (with a coach)

 Highly demanding mentally

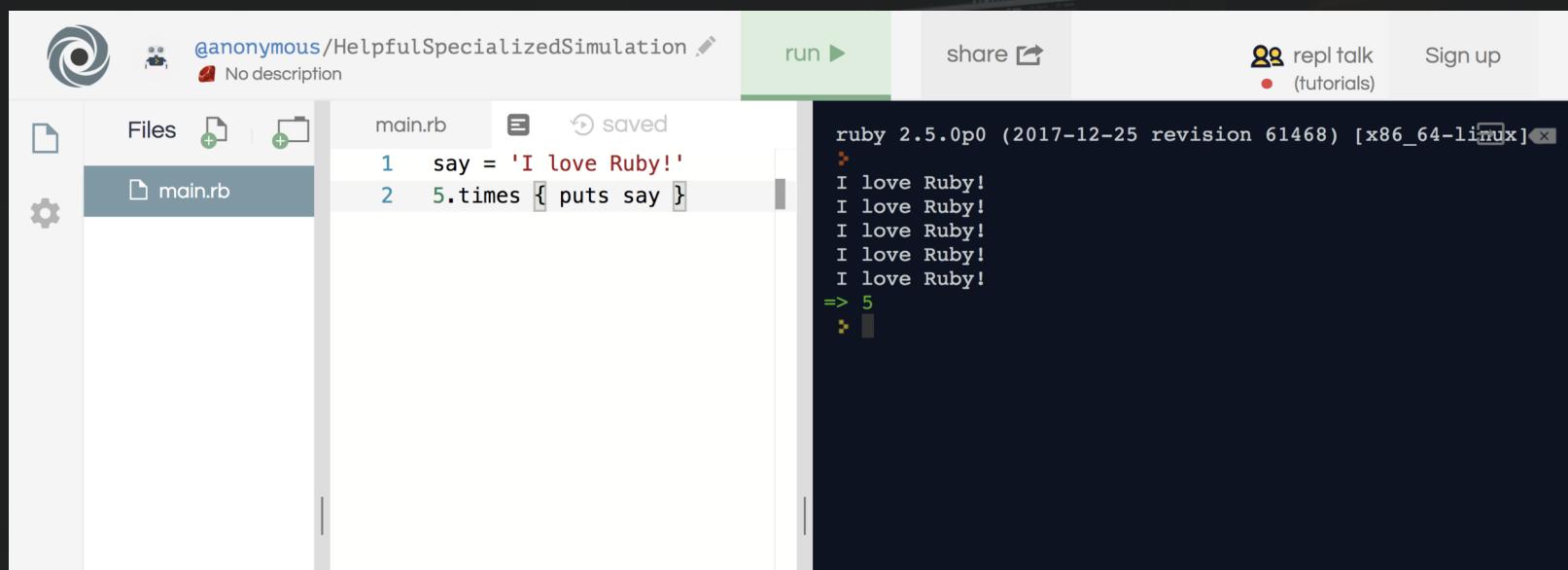
## Speaker notes

Ben Franklin's approach to learn writing could make for a nice approach - find a CodePen, remix it, try it another way. Rinse and repeat.

Look at code in open source projects - try to recreate in your own or another language. Or pull a branch from github, review it, then look at PRs to see how others reviewed.

# Other

## Repl.it



A screenshot of the Repl.it web-based development environment. The interface shows a file named 'main.rb' containing the following code:

```
say = 'I love Ruby!'
5.times { puts say }
```

The code is run, and the output in the terminal window is:

```
ruby 2.5.0p0 (2017-12-25 revision 61468) [x86_64-linux]
>
I love Ruby!
=> 5
>
```

# Deliberate Practice: Teams



# Mentor(ing)

# Pair(ing)

- Designed specifically to improve performance
- Highly demanding mentally
- Not much fun

## Speaker notes

For some of us, pairing is not fun.

It is demanding - almost everyone I know who likes pairing needs a break from it after 5pm.

Spelling bee, musicians, etc can often only practice for 2-3 hours (if that).

# Debt Reduction

# Performance Improvements

- Not much fun
- Feedback is continuously available

## Speaker notes

As a team, can you allot X amount of time to reducing tech debt or performance improvements?  
And since you have fancy regression tests, automated deploys and rollout/beta flags, you'll know when it worked or not. ;)

# Other

**20% time**

## **Spikes / Tracer Bullets**

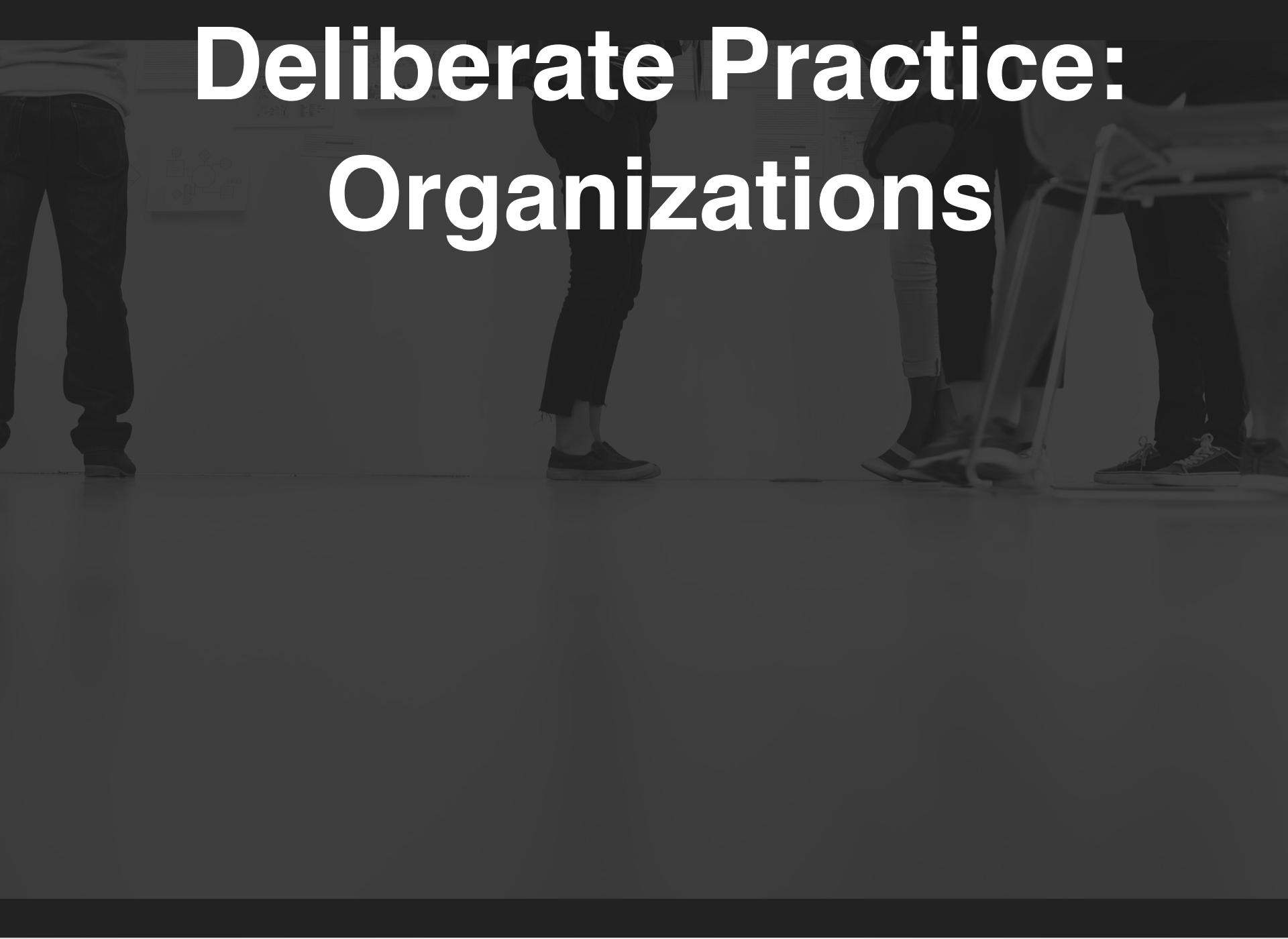
- ☑ Designed specifically to improve performance

## Speaker notes

Giving team mates time during the week to work on their skills and perform deliberate practice might pay off in numerous ways.

Doing spikes or using tracer bullet approaches could be another approach.

# Deliberate Practice: Organizations



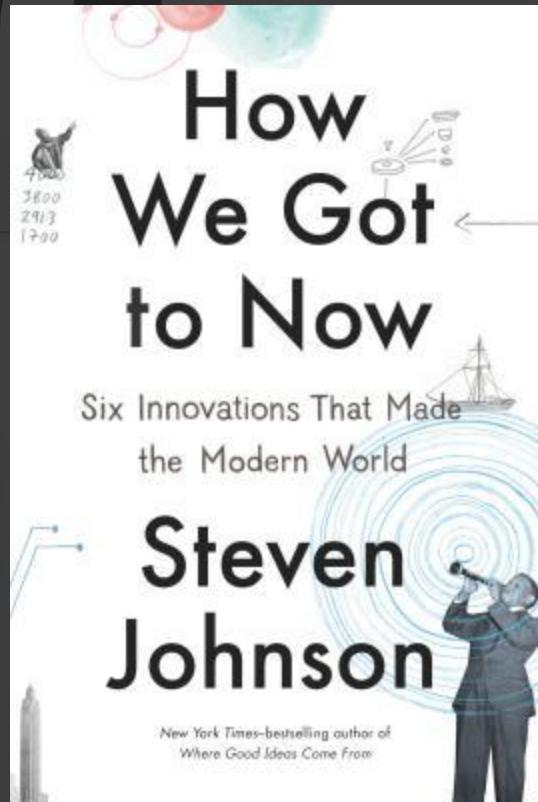
## Speaker notes

How can we apply deliberate practice to bigger orgs?

Talent is Overrated:

Most orgs are terrible at applying the principles of great performance. Many companies seem arranged almost perfectly to prevent people from taking advantage of these principles for themselves or the teams in which they work. That situation presents a great opportunity for companies that understand the principles...

# Deliberate Practice: Organizations



*“ big ideas that change the world typically do not happen in a single “Eureka!” moment. Instead, they come from putting together many idea fragments over time*

# Training

Conferences - VoxxedDays 

Education  
Sabbatical



Designed specifically to  
improve performance

# Community

## Open Source (Sponsorship) Shared Spaces

- ✓ Designed specifically to improve performance
- ✓ Feedback is continuously available

## Speaker notes

Apple / Pixar famously redesigned parts of their buildings to encourage mingling and sharing of ideas.  
Can you find ways to give people space to try things, get feedback and grow?

# R&D

Hackathons  
JS1K / Code Golf  
<https://kaggle.com>

- ✓ Can be repeated a lot
- ✓ Feedback is continuously available
- ✓ Highly demanding mentally

Speaker notes

<https://js1k.com/>

Kaggle is the place to do data science projects

# R&D

<https://kaggle.com>

Overview	
<b>Description</b>	Airbus is excited to challenge Kagglers to build a model that detects all ships in satellite images as quickly as possible. Can you find them even in imagery with clouds or haze?
<b>Evaluation</b>	
<b>Prizes</b>	
<b>Timeline</b>	Here's the backstory: Shipping traffic is growing fast. More ships increase the chances of infractions at sea like environmentally devastating ship accidents, piracy, illegal fishing, drug trafficking, and illegal cargo movement. This has compelled many organizations, from environmental protection agencies to insurance companies and national government authorities, to have a closer watch over the open seas.
<b>Algorithm Speed Prize</b>	<p><a href="#">Airbus</a> offers comprehensive maritime monitoring services by building a meaningful solution for wide coverage, fine details, intensive monitoring, premium reactivity and interpretation response. Combining its proprietary-data with highly-trained analysts, they help to support the maritime industry to increase knowledge, anticipate threats, trigger alerts, and improve efficiency at sea.</p>



## Speaker notes

Could your org work on a Kaggle problem over time? Even if tangential to business, might sharpen your skills and mental representations of things like data processing, machine learning, etc.

# Demo

## Speaker notes

I need a set of conditions for practicing - something I can do quickly, where I don't have to tinker just to get setup, etc.

These are a few things I like.



**Gatsby**

DOCS

TUTORIAL

PLUGINS

FEATURES

BLOG

SHOWCASE

# Build secure websites with React

Get Started →

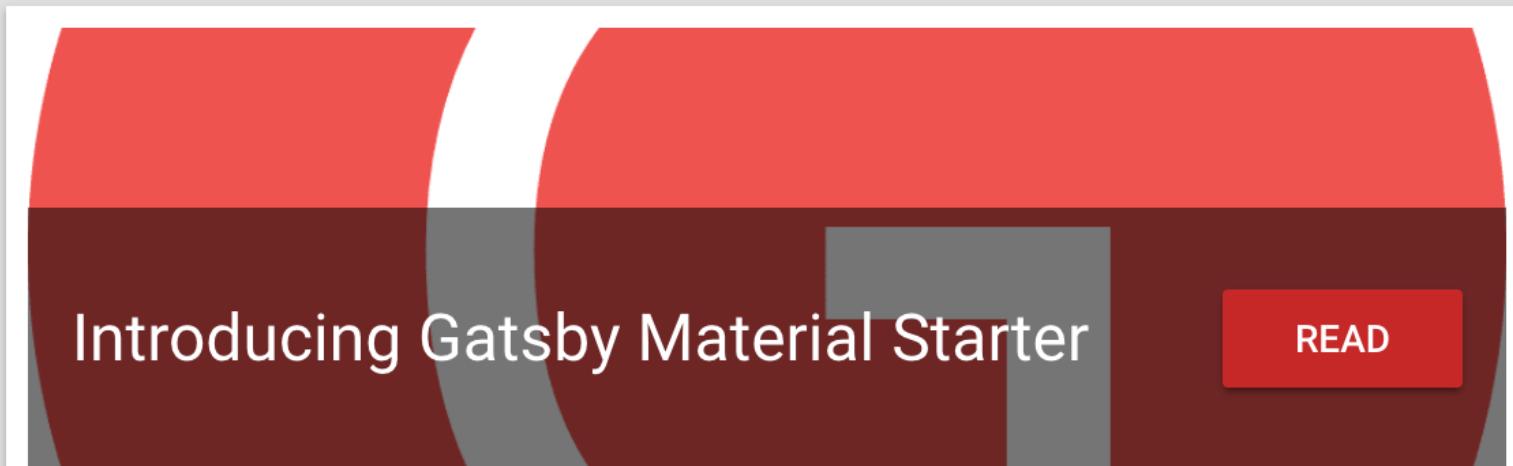
## Speaker notes

I wanted to get better at a few things - blogging and React. But I often get stuck just doing the setup, or deciding what I want to use for a blog platform.

GatsbyJS is a static site generator ( text or markdown or JS in, static html/JS out) that makes it easy to get started.



Home



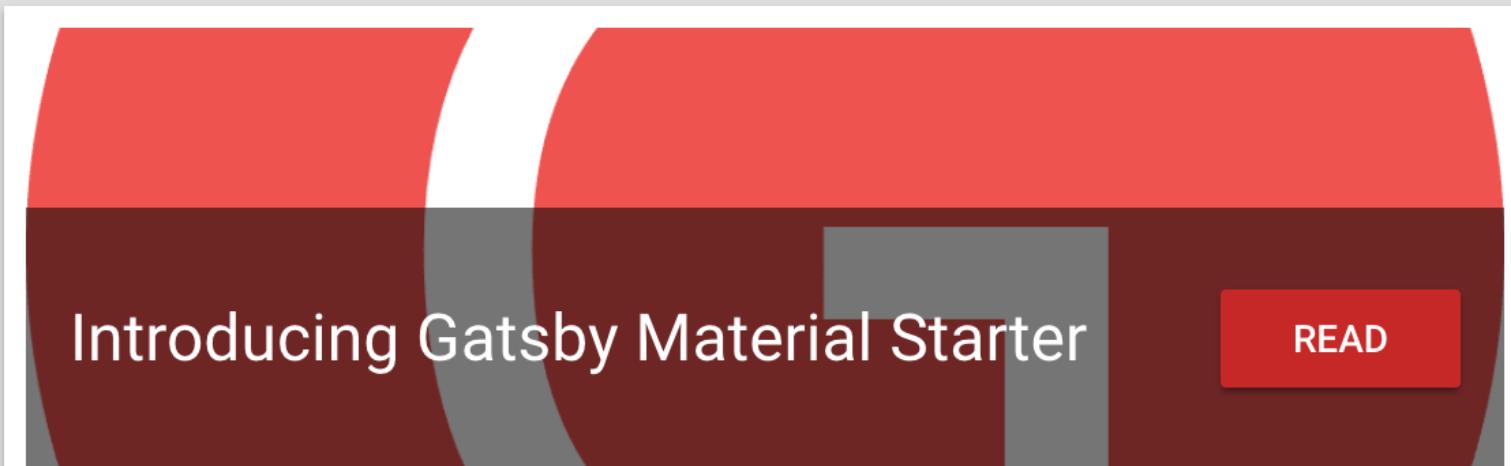
Published on 01/07/2018  
3 min read



# gatsby-material-starter



Home



Published on 01/07/2018  
3 min read



# gatsby-material-starter



# Andy

Because No Matter Where You Go, There You Are



Website



Twitter



Github

## Sleepless

I work with one of the most interesting people in the world.

[Continue Reading →](#) (estimated time: 42 hours)

```
{group.map(({ node }) => {
  return <Card key={node.fields.slug}>
    <Summary
      date={node.frontmatter.date}
      title={node.frontmatter.title}
      excerpt={node.excerpt}
      image={node.frontmatter.featuredImage}
      slug={node.fields.slug}
      readingTime={readingTime(node.html)}>
    </Summary>
  </Card>
})}
```

# Here we go, Voxxed Days

October 25, 2018

It's here! Tomorrow is the start of Voxxed Days Banff . I'm incredibly thankful that I will be presenting and am almost as excited to hear...

[Continue Reading →](#) (estimated time: 1 min read)



# Rands and the Second Act

September 27, 2018

I <3 Rands When I saw that Michael Lopp, aka Rands in Repose was going to be at Denver Startup Week (DSW) 2018, I was stoked. I knew I had...



[Continue Reading →](#) (estimated time: 5 min read)

# apex/up



## Tj Holowaychuk

 Follow

 Message

 Victoria, BC  [tjholowaychuk.com](http://tjholowaychuk.com)

Software engineer, hobbyist photography, and founder of Apex Software  
<https://apex.sh>



This coupon has the 50% off forever if you want to hand that out!

**æ-3D3B5F95F09C**



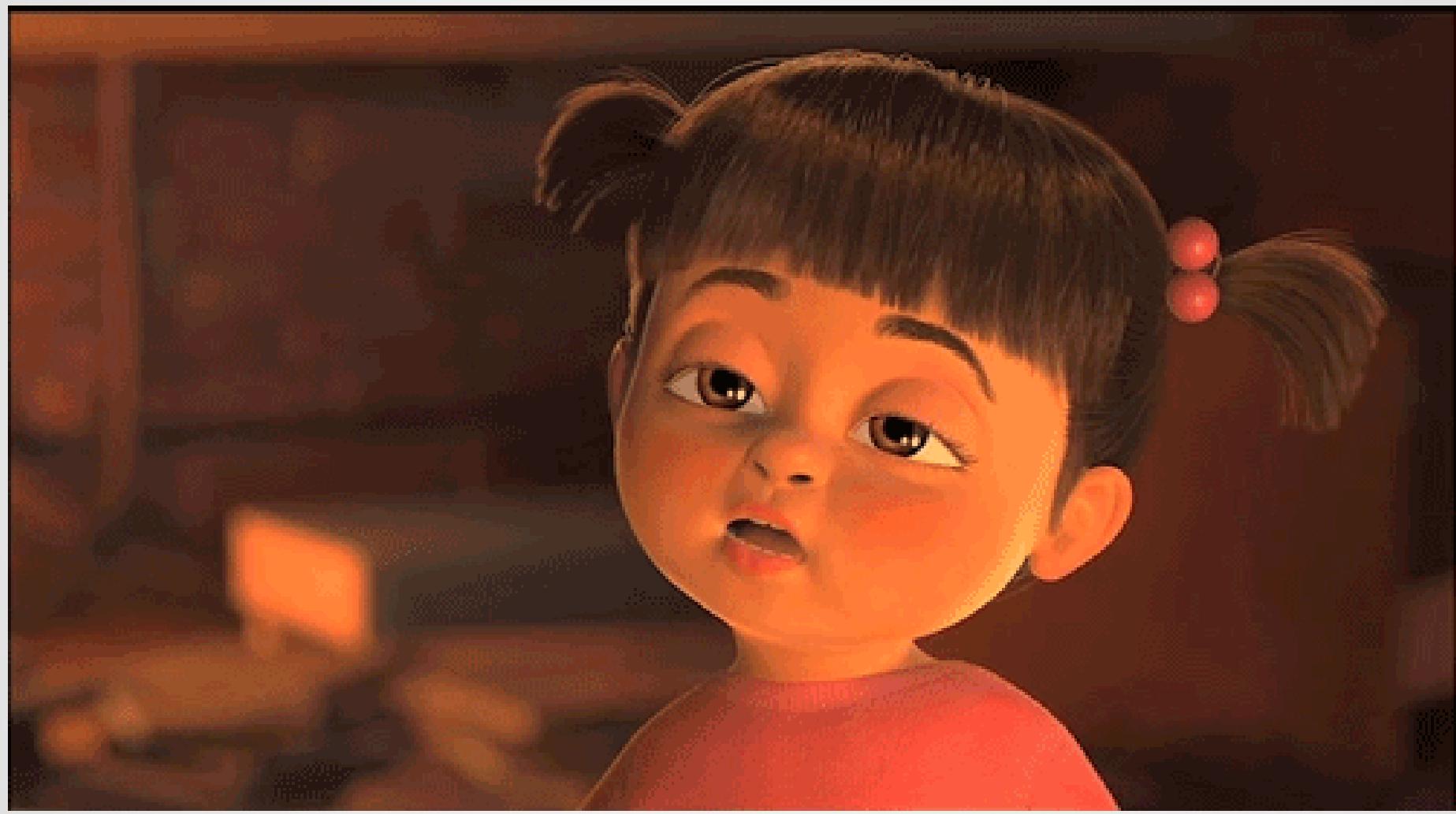
**Amazon  
CloudFront**

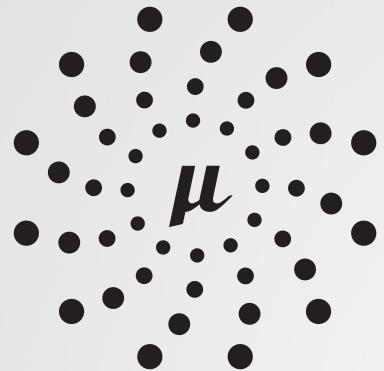


**Amazon API  
Gateway**



**AWS Lambda**





M I C R O N A U T <sup>TM</sup>

```
kotlin-micronaut-up voxxed-up-practice-1 ✘ 21m △ 🔍 ➔ ./gradlew clean build  
  
BUILD SUCCESSFUL in 6s  
15 actionable tasks: 15 executed  
kotlin-micronaut-up voxxed-up-practice-1 ✘ 21m △ ➔ up  
  
    build: 15 files, 20 MB (632ms)  
    deploy: commit 157b2a5 (9.226s)  
  
kotlin-micronaut-up voxxed-up-practice-1 ✘ 22m △ ➔ up url  
https://zluaek4sje.execute-api.us-west-2.amazonaws.com/staging/  
kotlin-micronaut-up voxxed-up-practice-1 ✘ 23m △ ➔ █
```

<https://zluaek4sje.execute-api.us-west-2.amazonaws.com/production/api/inventory/1491950358>

## Speaker notes

working - <https://zluaek4sje.execute-api.us-west-2.amazonaws.com/production/api/inventory/1491950358>  
and now in staging - <https://zluaek4sje.execute-api.us-west-2.amazonaws.com/staging/api/found/deer>

# zeit.co/now

## Now – Global Serverless Deployments



```
bash
▲ ~/my-app $ ls
package.json  index.js    lib    static
▲ ~/my-app $ now
> Ready! https://my-proj-hj1v2m.now.sh
(copied to clipboard) [440ms]
> Upload [=====] 100% 5.7s
> Sync complete (1.38MB) [5702ms]
▲ ~/my-app $
```

### Docker

```
$ my-app/ ls
Dockerfile server.go
$ my-app/ now
```

### Node.js

```
$ my-api/ ls
package.json index.js
$ my-api/ now
```

### Static Websites

```
$ my-site/ ls
index.html logo.png
$ my-site/ now
```

[zeit.co/now](https://zeit.co/now)



Speaker notes

<https://rust-http-microservice-qttnpkssqb.now.sh/>

<https://denverms-villains-dev-ohvgvnzzvo.now.sh/> if it works...

<https://java-spark-graal-oadfvvjvzi.now.sh/> (old version)

```
struct HelloWorld;
const HELLO_WORLD: &'static str = "Hello, world!";

impl Service for HelloWorld {
    type Request = Request;
    type Response = Response;
    type Error = hyper::Error;
    type Future = Box<Future<Item=Self::Response, Error=Self::Error>>;

    fn call(&self, _req: Request) -> Self::Future {
        Box::new(futures::future::ok(
            Response::new()
                .with_header(ContentLength(HELLO_WORLD.len() as u64))
                .with_body(HELLO_WORLD)
        ))
    }
}
```

<https://github.com/zeit/now-examples>

```
struct HelloWorld;
const HELLO_WORLD: &'static str = "Hello, world!";

impl Service for HelloWorld {
    type Request = Request;
    type Response = Response;
    type Error = hyper::Error;
    type Future = Box<Future<Item=Self::Response, Error=Self::Error>>;

    fn call(&self, _req: Request) -> Self::Future {
        Box::new(futures::future::ok(
            Response::new()
                .with_header(ContentLength(HELLO_WORLD.len() as u64))
                .with_body(HELLO_WORLD)
        ))
    }
}
```

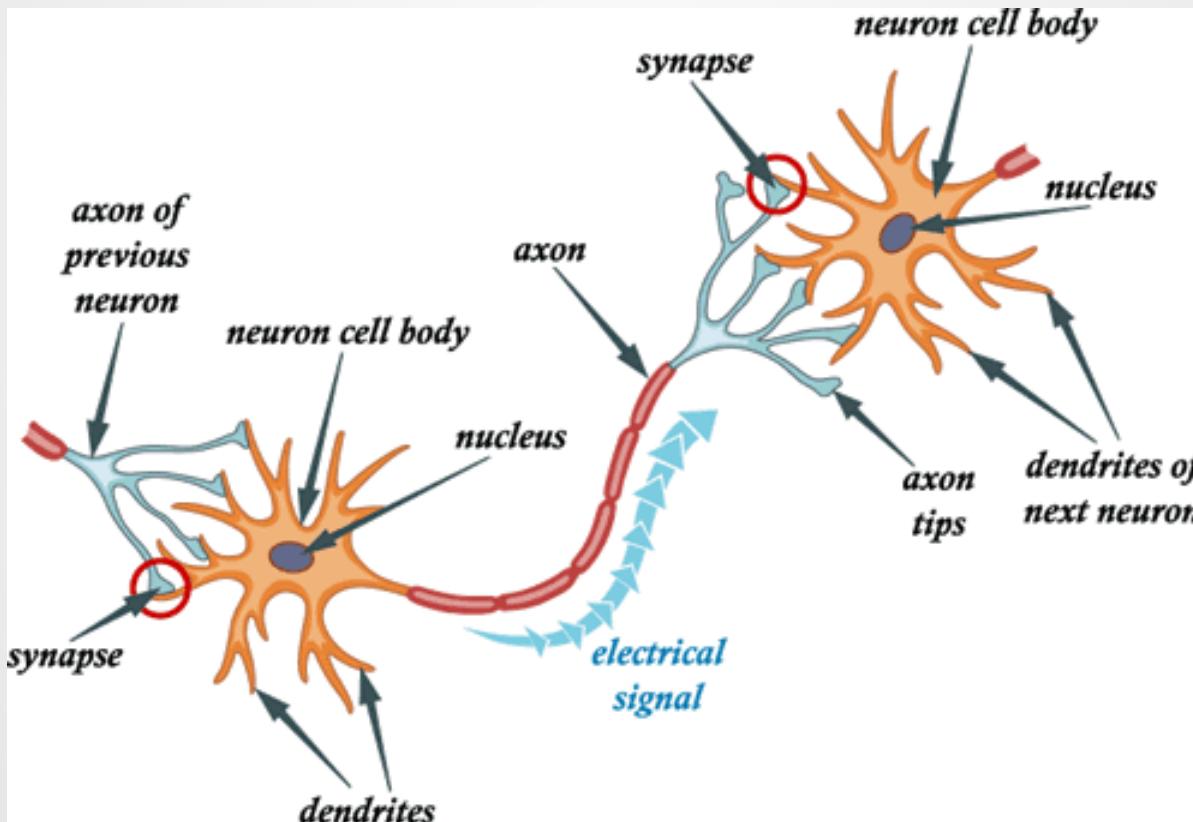
<https://rust-http-microservice-xwahcbackv.now.sh/>

# Myelin and





# Why Practice Actually Makes Perfect



Speaker notes

<https://blog.bufferapp.com/why-practice-actually-makes-perfect-how-to-rewire-your-brain-for-better-performance>



## Speaker notes

"the knowledge"

<https://www.nytimes.com/2014/11/10/t-magazine/london-taxi-test-knowledge.html>

<https://www.ncbi.nlm.nih.gov/pubmed/17024677> - greater grey matter in hippocampi

Fred Housego - cabbie who won "Mastermind" a british trivia show in 1980

# Thank You

@virtualandy



# Appendix



# The Art Of Making Noodles By Hand



Watch later Share

## Speaker notes

"You have to make 100 bowls a day. I used to make 500"

via <https://kottke.org/18/06/a-pair-of-asian-chefs-demonstrate-the-art-of-making-noodles-by-hand>

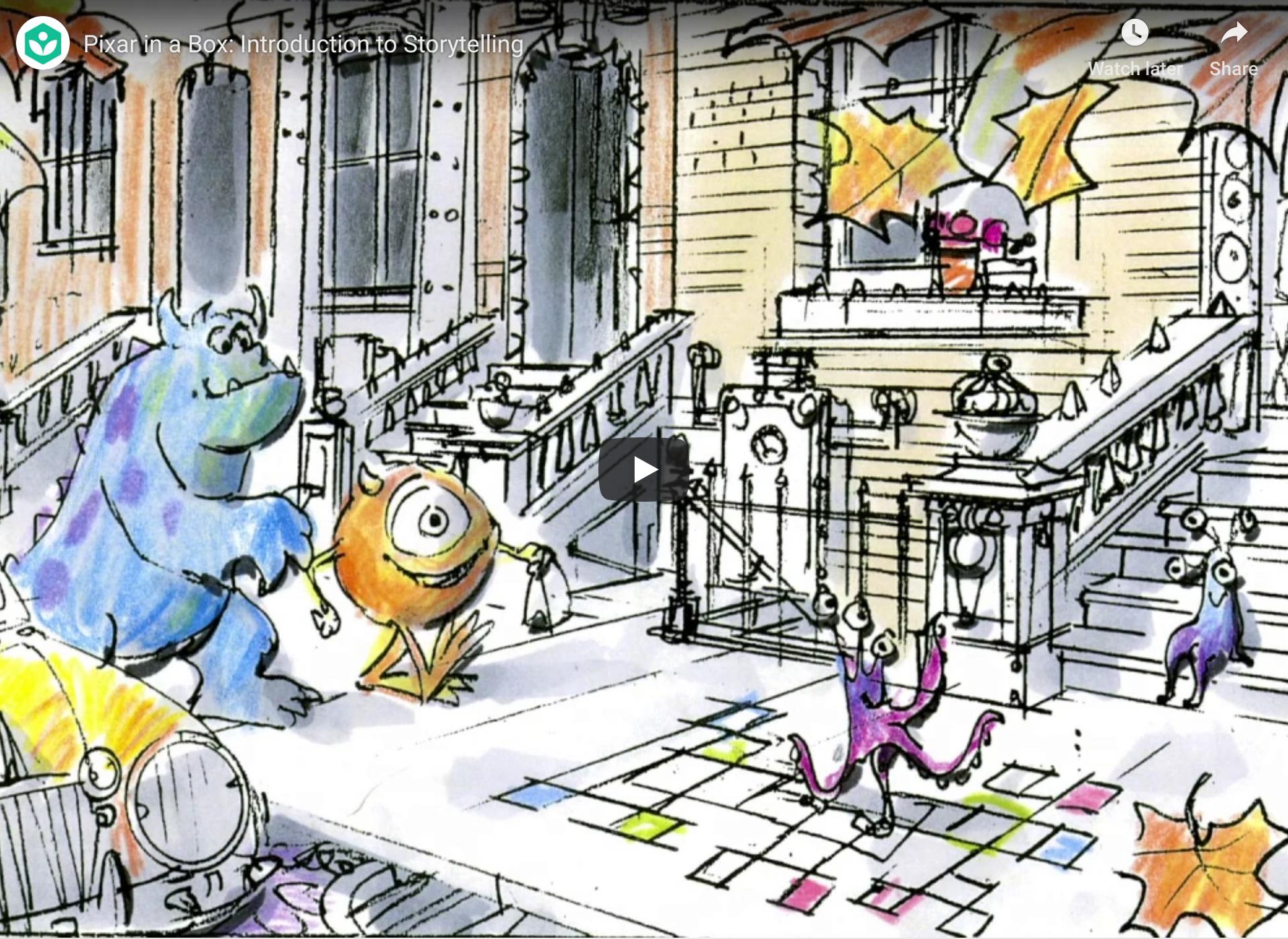
Shuichi Kotani

9:10 - "I had only been learning for 3 years" Then later - "There are so many kinds of soba, I've been doing it for 18 years but can't master them all"



Watch later

Share



## Speaker notes

[Pixar in a Box: Introduction to Storytelling - YouTube](<https://youtu.be/1rMnzNZkIX0?t=122>)

Stories aren't written once, they are a lot of work - 2:00

# Deliberate Practice

# PEAK

SECRETS FROM  
THE NEW SCIENCE  
OF EXPERTISE

Anders Ericsson

*and* Robert Pool

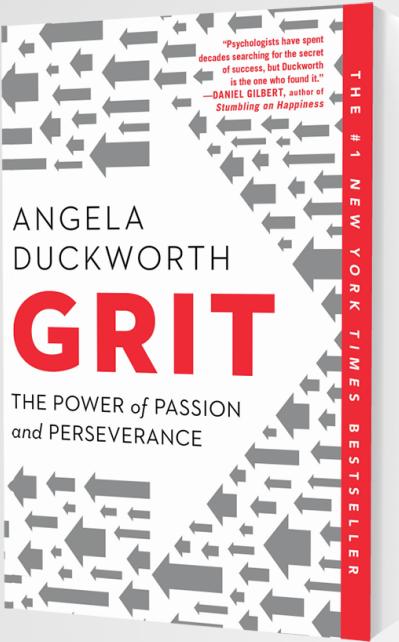
"[Peak] offers an optimistic anti-determinism that ought to influence how people educate children, manage employees, and spend their time. The good news is that to excel one need only look within." —THE ECONOMIST

10<sup>th</sup> ANNIVERSARY EDITION  
REVISED AND UPDATED

# Talent Is Overrated

*What Really Separates World-Class  
Performers from Everybody Else*





*“ You need to break down big goals into smaller and smaller parts, and then you need to give them the part that they’re almost able to do, and with support can do.*



# Outliers



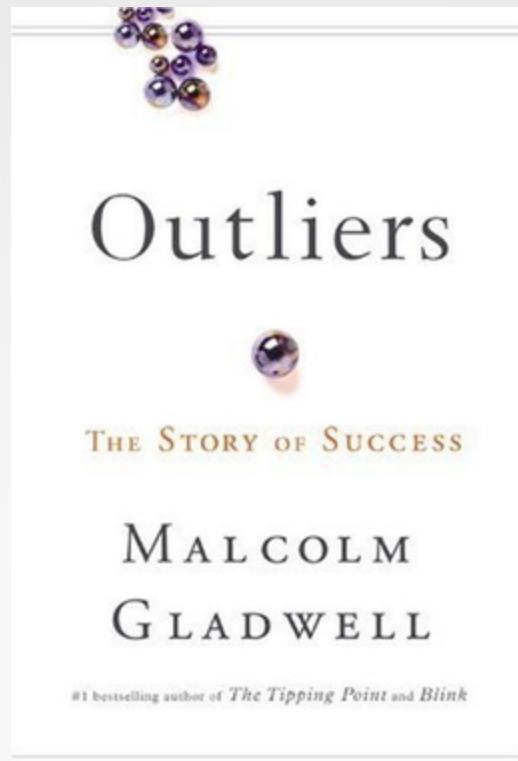
THE STORY OF SUCCESS

MALCOLM  
GLADWELL

#1 bestselling author of *The Tipping Point* and *Blink*

---

*10,000 Hours*



# 10,000 Hours

 **FREAKONOMICS** How To Become Great At Just About Anything

## Speaker notes

Science fight!

Gladwell took that paper and coined the idea of 10K hours.

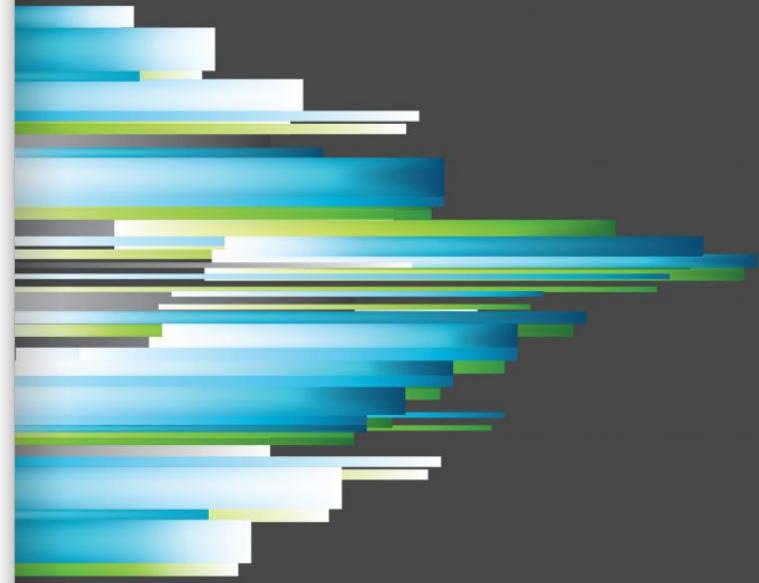
But it's not quite right -

[https://www.salon.com/2016/04/10/malcolm\\_gladwell\\_got\\_us\\_wrong\\_our\\_research\\_was\\_key\\_to\\_the\\_10000\\_hour\\_rule/](https://www.salon.com/2016/04/10/malcolm_gladwell_got_us_wrong_our_research_was_key_to_the_10000_hour_rule/)

THE SCIENCE OF LEAN SOFTWARE AND DEVOPS

# ACCELERATE

Building and Scaling High Performing  
Technology Organizations



Nicole Forsgren, PhD  
Jez Humble, *and* Gene Kim

*with forewords by Martin Fowler and Courtney Kissler  
and a case study contributed by Steve Bell and Karen Whitley Bell*

## Speaker notes

"They describe how effective IT delivery organizations take about an hour to get code from committed-to-mainline to running-in-production, a journey lesser organizations take months to do." - Forward in Accelerate

It's 2018 and LOTS of orgs still take months to get code running in production.

