

# Not Invented Here

## Things Rails Didn't Innovate



Caleb Thompson

We'll talk a bit about  
Rails

But that's my elevator  
pitch

The point:

You can be more  
effective

at your job

by not innovating

Rails didn't really invent  
much at all.

Its success is just a matter  
of **execution** and **delivery**



Great ideas brought  
together in new ways

How we got here













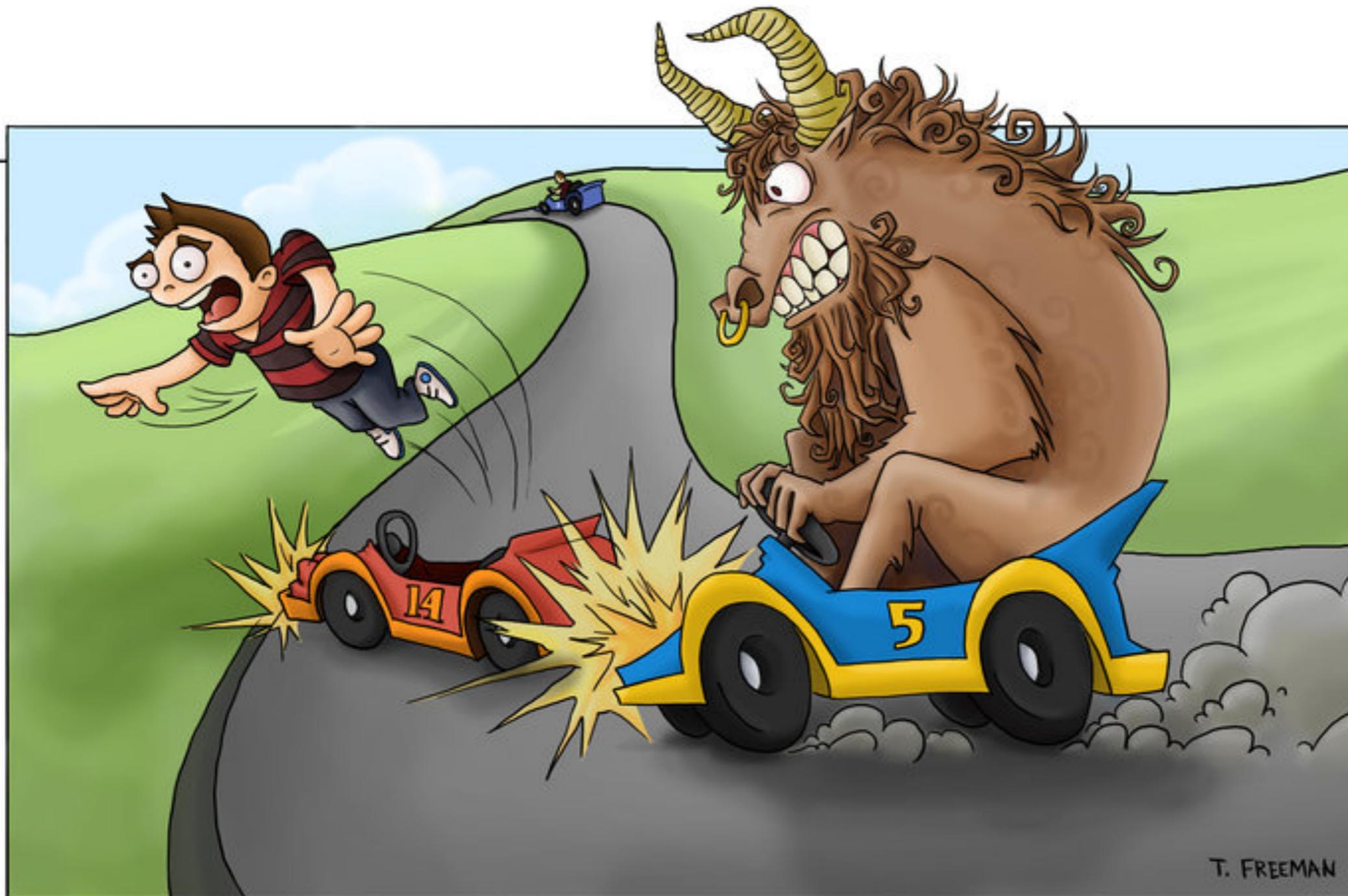
...ouwe S-Klasse.











T. FREEMAN

# ROYAL ROAD





**Zurück**

Wichtig für Postfachbesitzer  
Anweisung beachten!

Wichtig für DHL-Kunden  
Anweisung beachten  
bei Zustellung mit  
Kontaktdaten

11201

68 Juy St.  
#405  
Brooklyn, NY  
11201

**ZURÜCKGEHEND**

Zurück/Betour

Empfänger ist nicht der  
angewiesene Adressat oder  
ist verstorben

Empfänger verzögert die  
Abholung der Ware für die  
Post. Anweisung beachten

Annahme verzögert  Betour

Annahme verweigert  Nicht annehmen

Wicht. Adressat

11201

11201

11201

510.350  
US POSTAGE  
INTL FIRST CLASS  
0902007751481  
11201

**DHL**

Gen. Päckchen a.d.A.

ZIP: 11201

09/14/12 New Jersey Int'l BAC  
Zip Codes help speed the  
delivery of the mails

1.334.639 8

Deutsche Post

VON PLATZ  
CT N1

HUB 55

00507 840 400 80

United States Postal Service  
Customs Declaration CN 22  
May be opened officially See Instructions on Reverse  
Do not duplicate without USPS approval

For  Gift  Commercial sample  Other

Documents  Other

Quantity and detailed description of contents (1)

Book

Weight (2) 14

Value (3) 10

**RTS**  
RETURN TO SENDER

NY, 11201

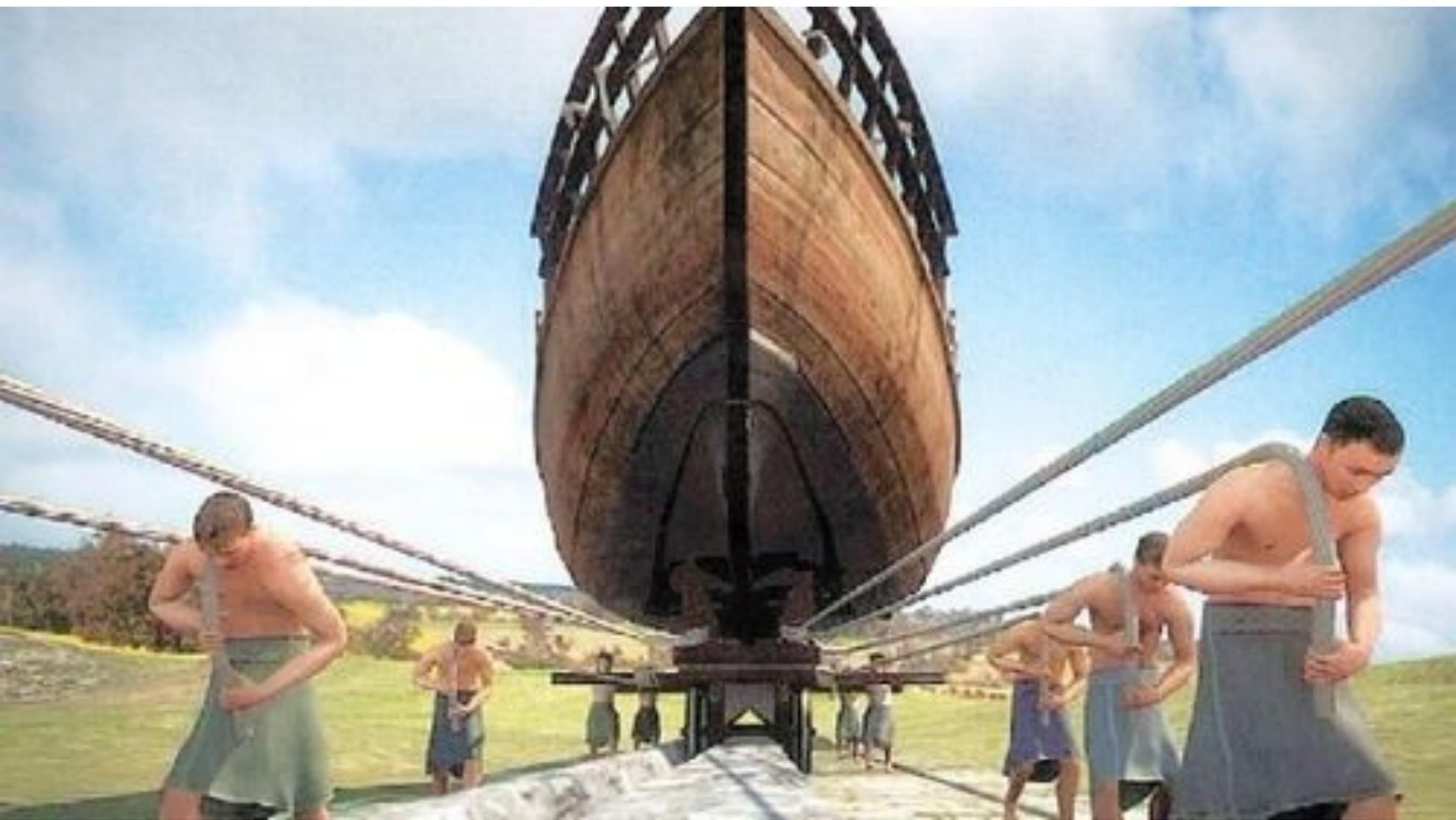
Deutsche Post  
via FZ

bitte nicht bekleben

PÜB ... 1... 1...







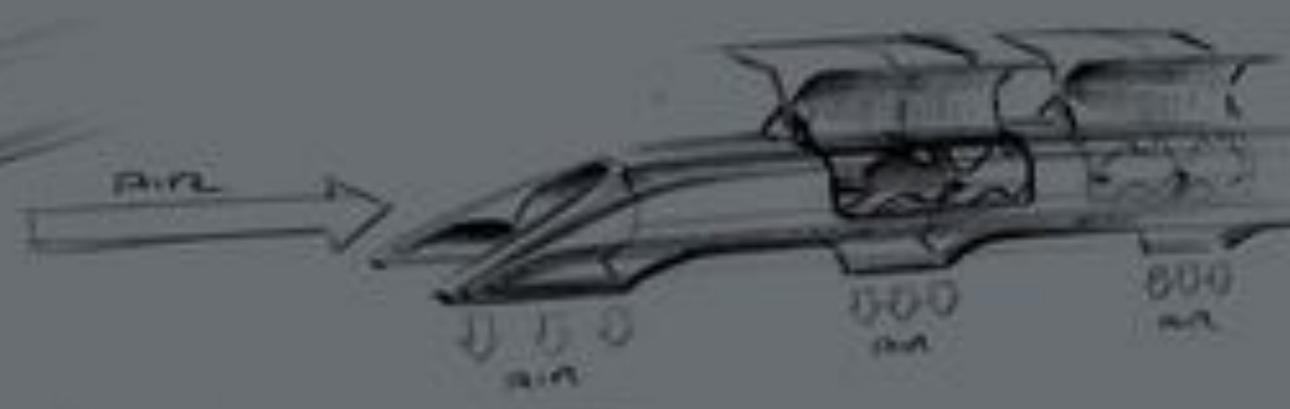
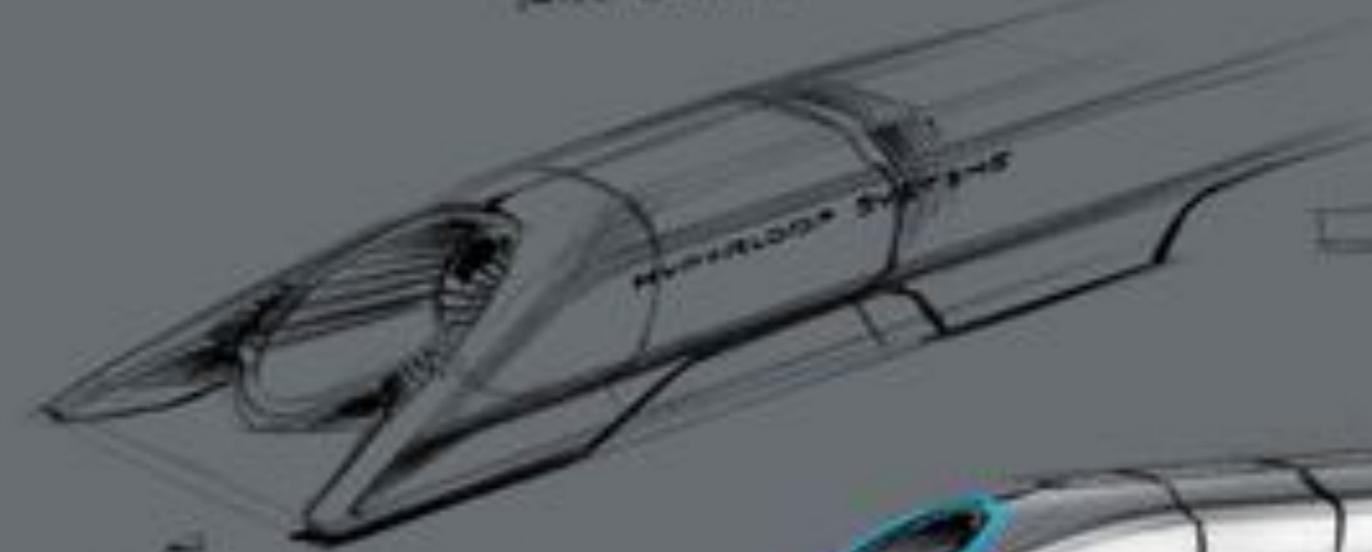
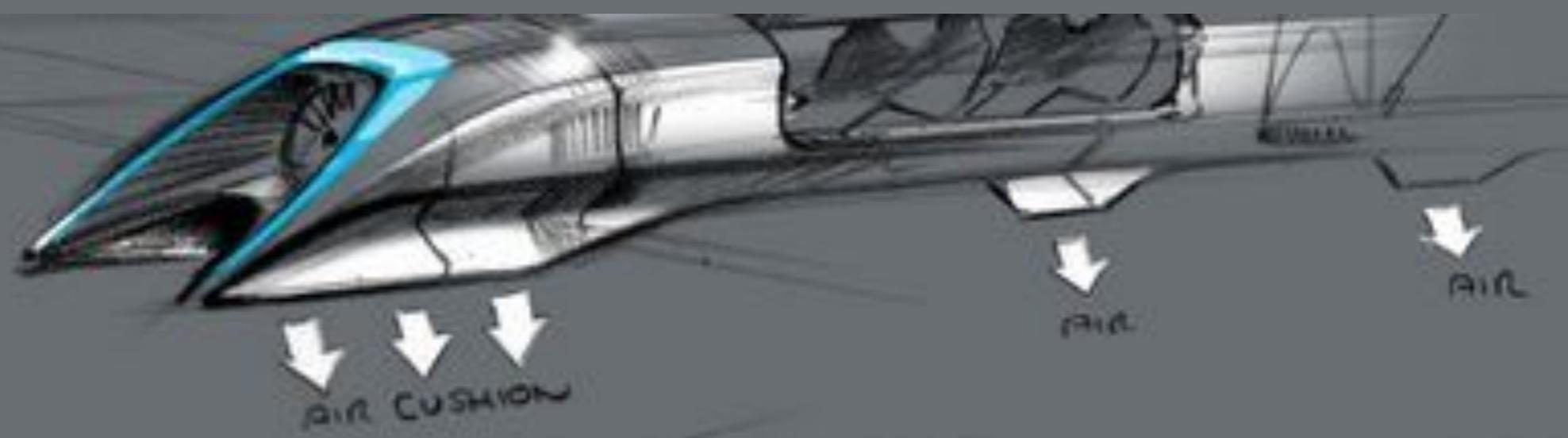




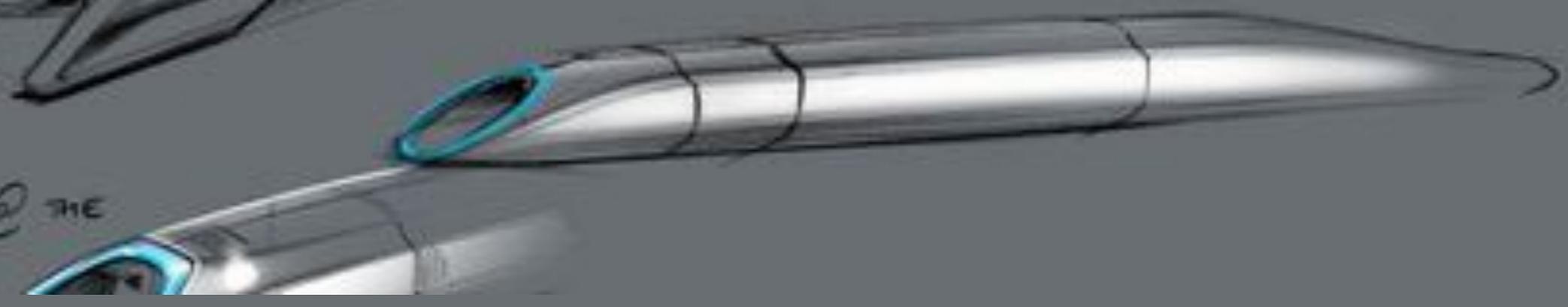








MORE PLANTED @ THE FRONT!



Haha, what?

They weren't  
reinventing the wheel

Rails stole ideas

...but which ones?

What do we  
think of when  
we think Rails?



Model

View

Controller was conceived as a general solution to the problem of developers controlling a large and complex data set.

The essential purpose of MVC is to bridge the gap between the human user's mental model and the digital model that exists in the computer.

**Trygve Reenscrag**  
*XEROX PARC 1978-79*

The mapping between  
database tables and  
business logic in  
applications happens in

**Active** Record



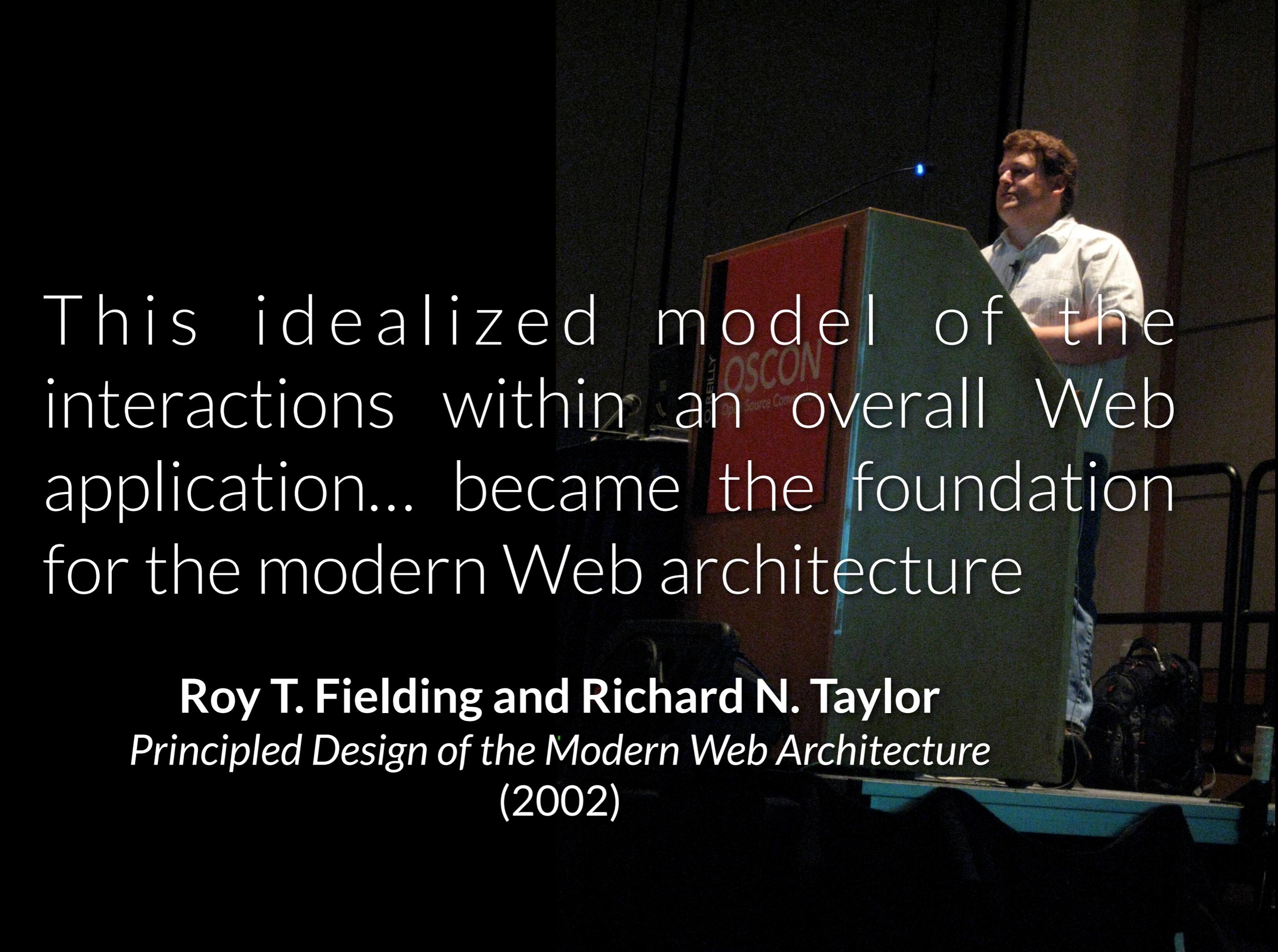
An object that wraps a row in a database table or view, encapsulates the database access, and adds domain logic on that data.

**Martin Fowler**

*Patterns of Enterprise Application Architecture*

# **RE**presentational **S**tate **T**ransfer

is a uniform interface for the web

A photograph of a man with curly hair, wearing a light-colored button-down shirt and blue jeans, standing behind a podium on a stage. The podium is dark wood with a red panel on the left side that has the text 'OSCON' and 'Open Source Conference' visible. A microphone is positioned in front of him. The background is dark, suggesting an indoor event space. The text 'This idealized model of the interactions within an overall Web application... became the foundation for the modern Web architecture' is overlaid in white on the left side of the image.

This idealized model of the interactions within an overall Web application... became the foundation for the modern Web architecture

**Roy T. Fielding and Richard N. Taylor**  
*Principled Design of the Modern Web Architecture*  
(2002)

Rails didn't *invent* REST

# Convention over Configuration

seeks to decrease the number of **decisions** that developers need to make, gaining **simplicity**, but not necessarily losing **flexibility**.

**maven**

defaults

config files

  
spring

JavaBeans

**ERB** provides an *easy to use* but *powerful* templating system for Ruby.

 [ruby](#) / [ruby](#)

---

 branch: **trunk** ▾

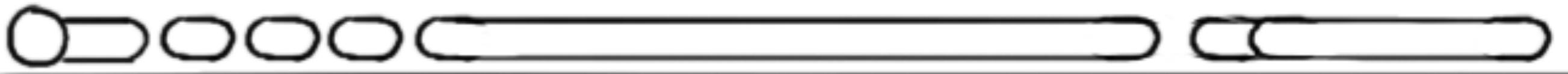
[ruby](#) / [lib](#) / **erb.rb**



# Merb

- asset pipeline
- extension api
- parameter whitelisting and blacklisting (`strong_parameters`)
- ORM / JavaScript agnostic

***So why is Rails so  
popular?***



- Google
- Slashdot: New...
- Woot: One Da...
- BBC NEWS | Ne...
- Penny Arcadel ...
- Google

Google

**Execution**

is crazy

important

# Presentation is key



**What can we learn from  
this?**

There is nothing wrong  
with taking other's ideas

Rails was built on the  
shoulders of giants

That worked out  
pretty well

Keep it simple.

Strong, useful conventions make  
code easy to find and reduce  
mundane decision making

**Not designed by  
committee**

DHH still contributes

Released in July of  
2004

Didn't share commit rights  
until February of 2005

strong\_parameters

turbolinks

turbolinks

(not a popular decision)

While we may not  
always agree with him

It doesn't matter; he's  
doing it anyways

While this can be frustrating,  
you can't argue with success

# rails 4.1.1

Ruby on Rails is a full-stack web framework optimized for programmer happiness and sustainable productivity. It encourages beautiful code by favoring convention over configuration.

INSTALL > `gem install rails`

 Download  Badge  Subscribe  RSS

## Authors

David Heinemeier Hansson

**34,979,484** **32,104**  
total downloads for this version

What can we take  
from this?

**Take ideas**

I know you want to  
build.

Interesting problems  
are fun to solve

but they already have  
been

Don't be seduced by  
the problem

**You are trying to get  
something out the door**

Buy for parity

**build for competitive advantage**



123 Main St  
Anytown, MA 12345



123 Main St  
Apartment #5  
Anytown, MA 12345



123 Main St  
Basement  
Anytown, MA 12345



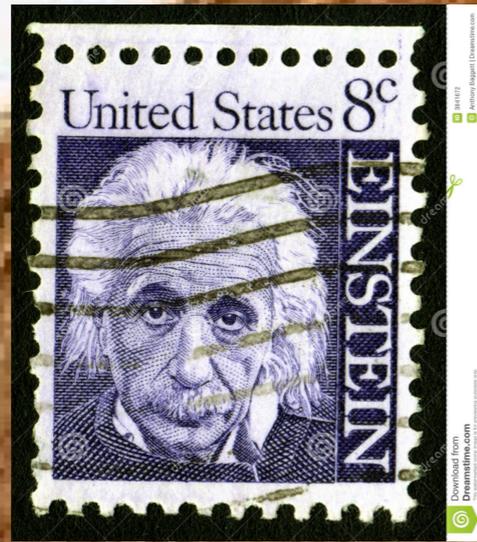
c/o somebody else  
123 Main St  
Anytown, MA 12345



Bank of Canada  
234 Laurier Avenue West  
Ottawa, Ontario, Canada  
K1A 0G9



**Caleb Thompson**  
**FNBA Downtown branch**  
**Downtown, Anchorage,**  
**Alaska**



# Caleb Thompson FNBA Downtown branch Downtown, Anchorage, Alaska





Are you going to have a better idea  
than Fielding had about REST?

maybe

probably not

**Take ideas**

But don't take it from  
me

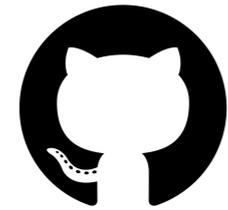




Thank you.

Caleb Thompson

@thompson\_caleb

 calebthompson

caleb@calebthompson.io

Don't just sit there. Learn  
Something.

[learn.thoughtbot.com](https://learn.thoughtbot.com)

**SCOTRUBY14** for 30% off a  
Learn Prime subscription

