

# Defying Bloomberg

Coal to Code



MinedMinds.org

**Marvin Laucher**  
**Amanda Laucher**

# Mined Minds

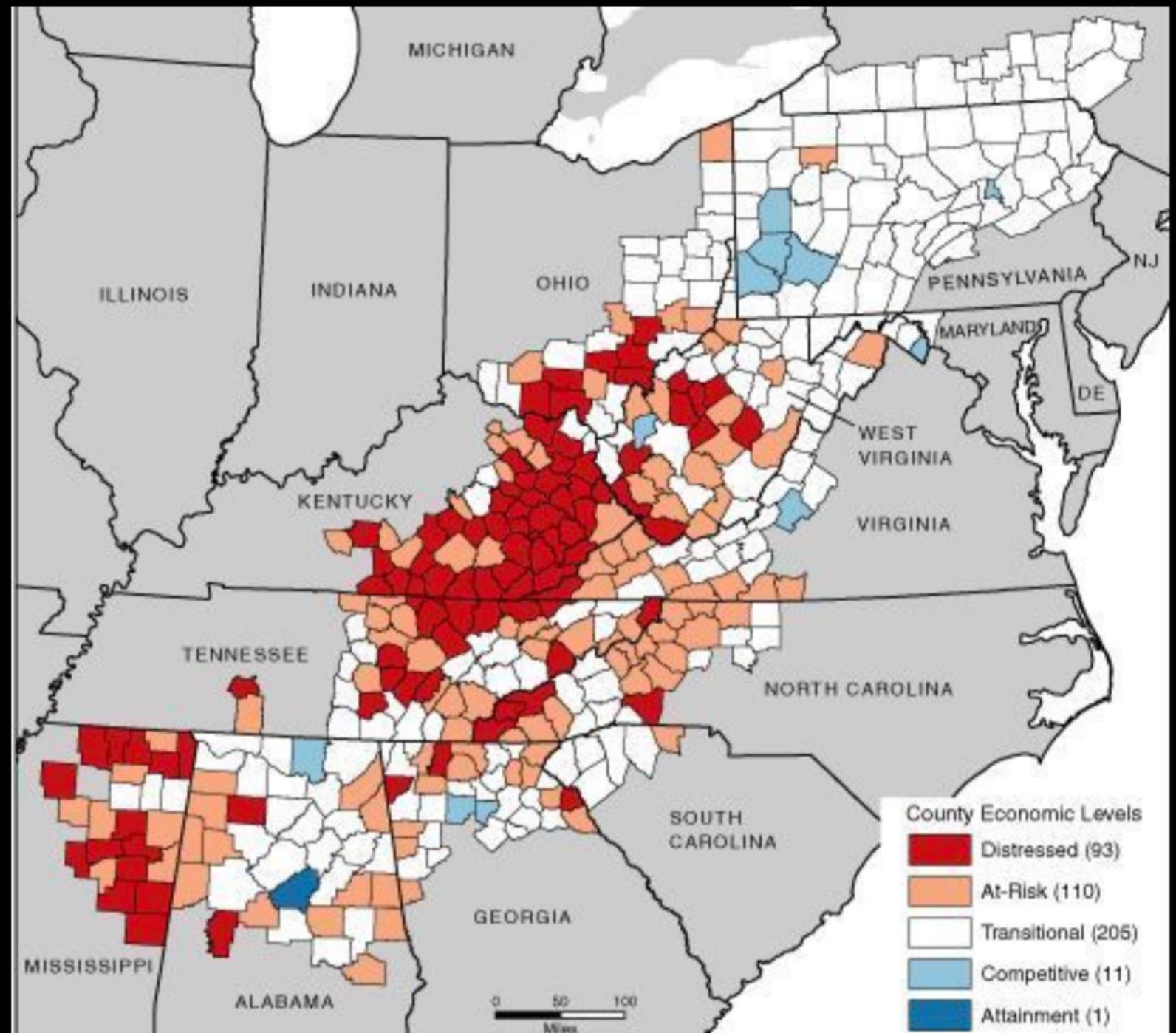
Non-profit bringing  
programming  
opportunities to rural  
communities in  
Appalachia

Consultancy employing  
Appalachian software  
developers



Up to 94% of coal jobs have been lost between 2011 & 2016

For every coal mining job lost 5 other jobs are affected

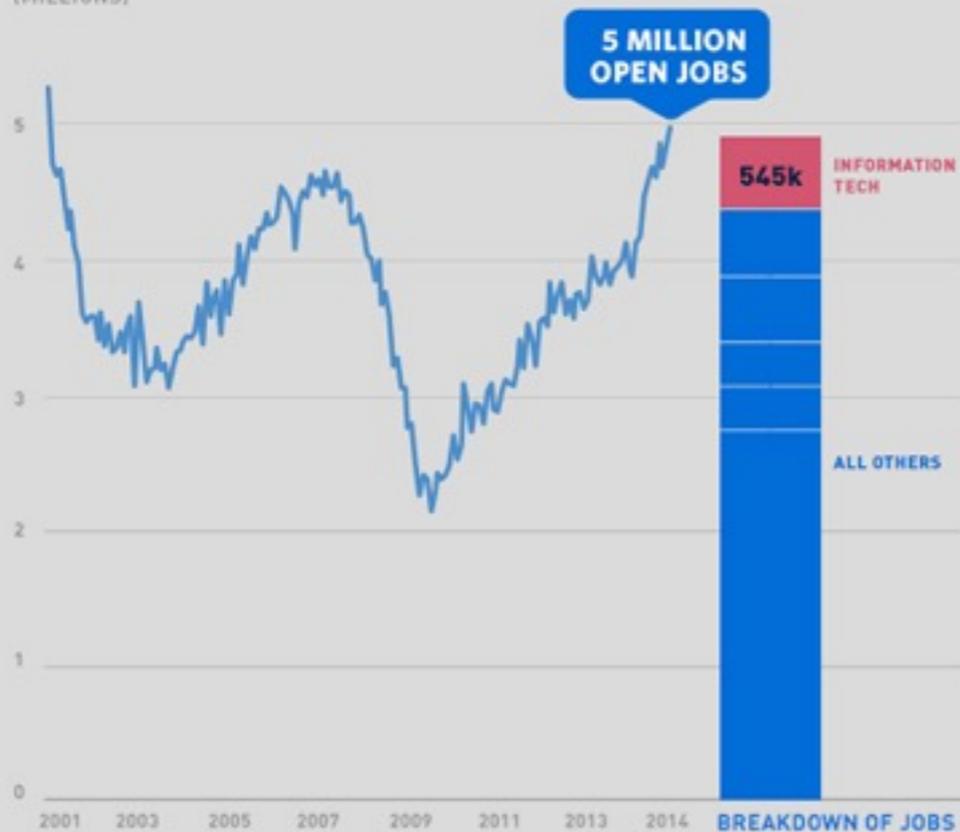


Meanwhile in tech...

## AMERICA HAS MORE OPEN JOBS TODAY THAN AT ANY POINT SINCE 2001

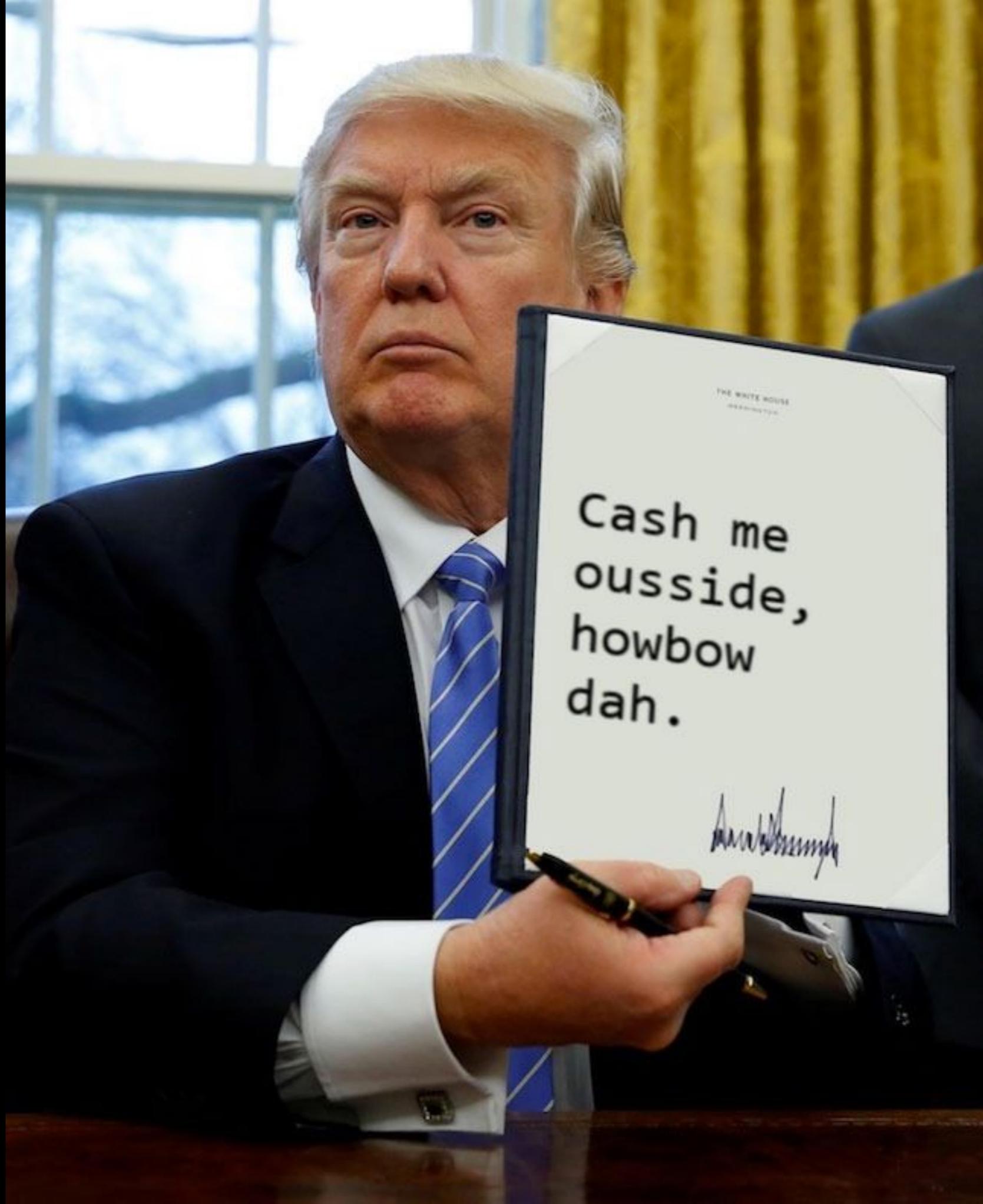
Over half a million are well-paying jobs in information technology, more than any other major occupation.

OPEN JOBS (MILLIONS)



SOURCE: BLS FOR TOTAL OPENINGS; BURNING GLASS FOR OCCUPATIONS

“The U.S. Department of Labor has said 1.4 million unfilled software development — software development alone — 1.4 million unfilled jobs by 2020. So the skills gap is real,” Richard Burke, CEO of Chicago-based Envoy Global



THE WHITE HOUSE  
WASHINGTON

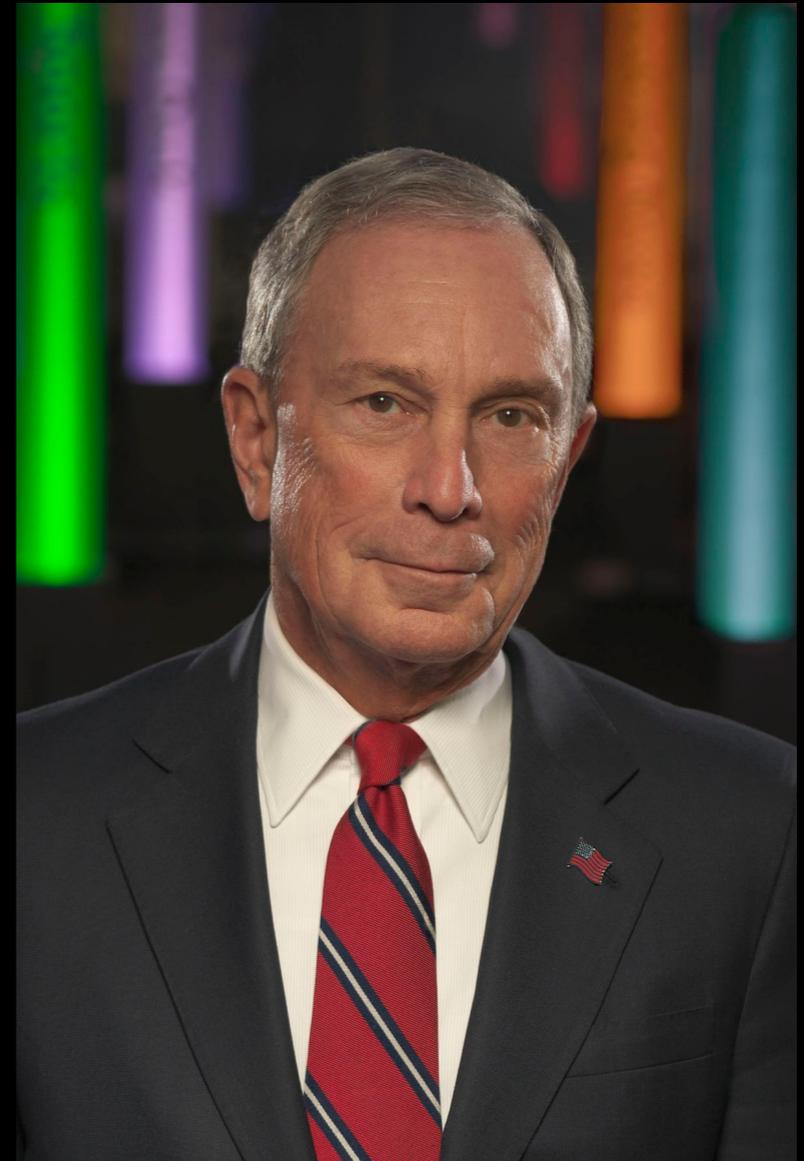
Cash me  
ousside,  
howbow  
dah.

*Donald Trump*

# Economics



VS

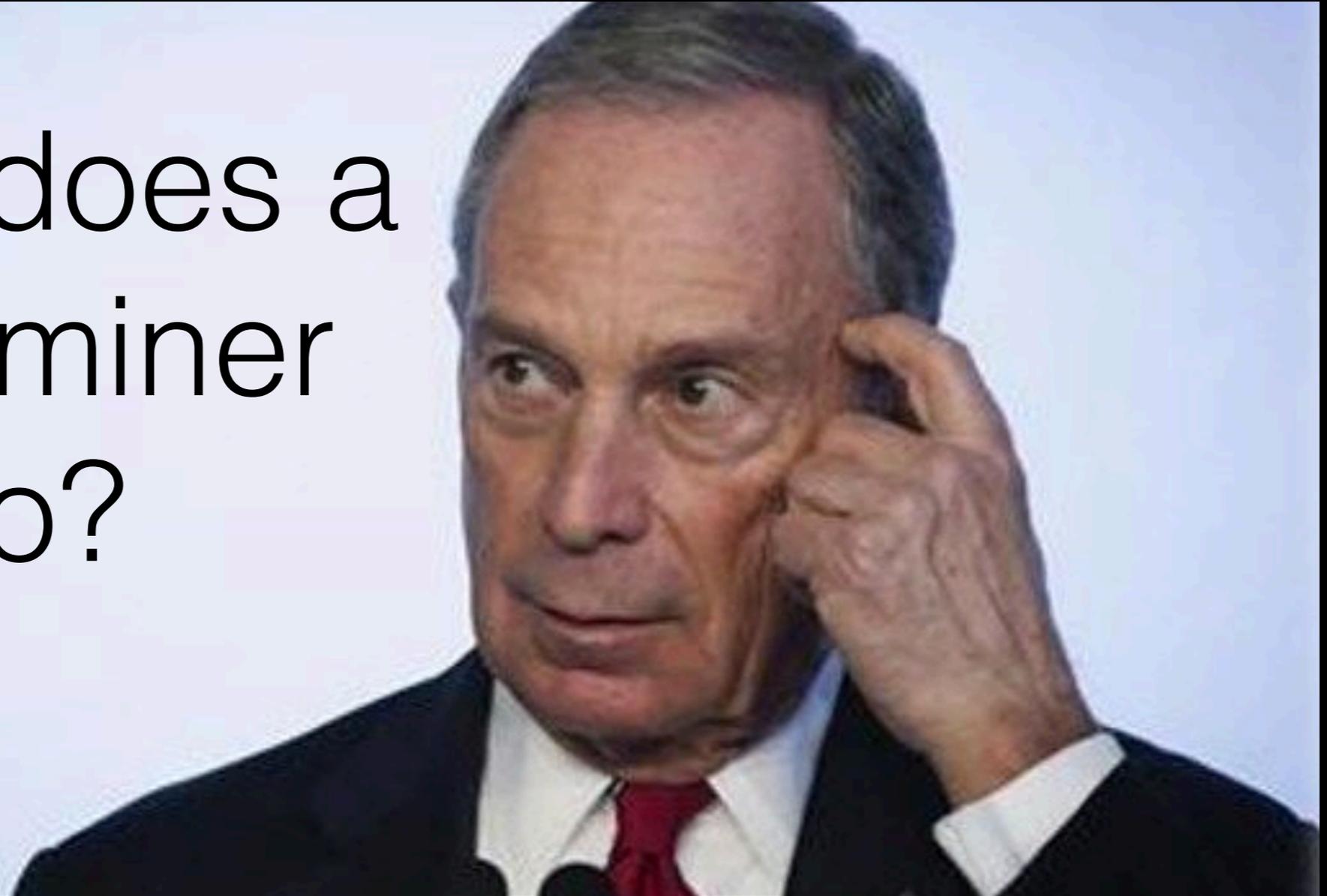


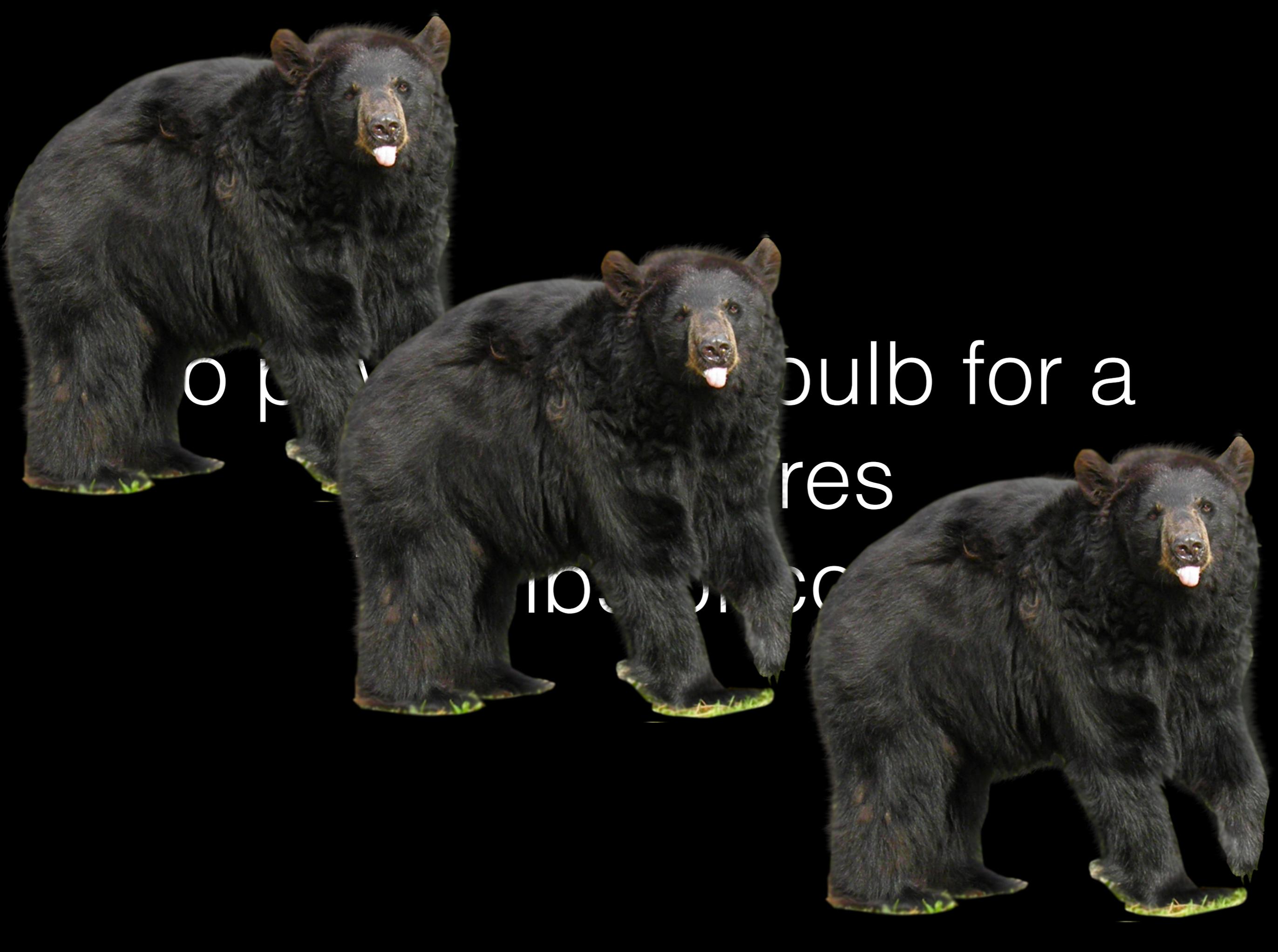
IT ALWAYS SEEMS  
IMPOSSIBLE  
UNTIL IT'S DONE.

~ Nelson Mandela

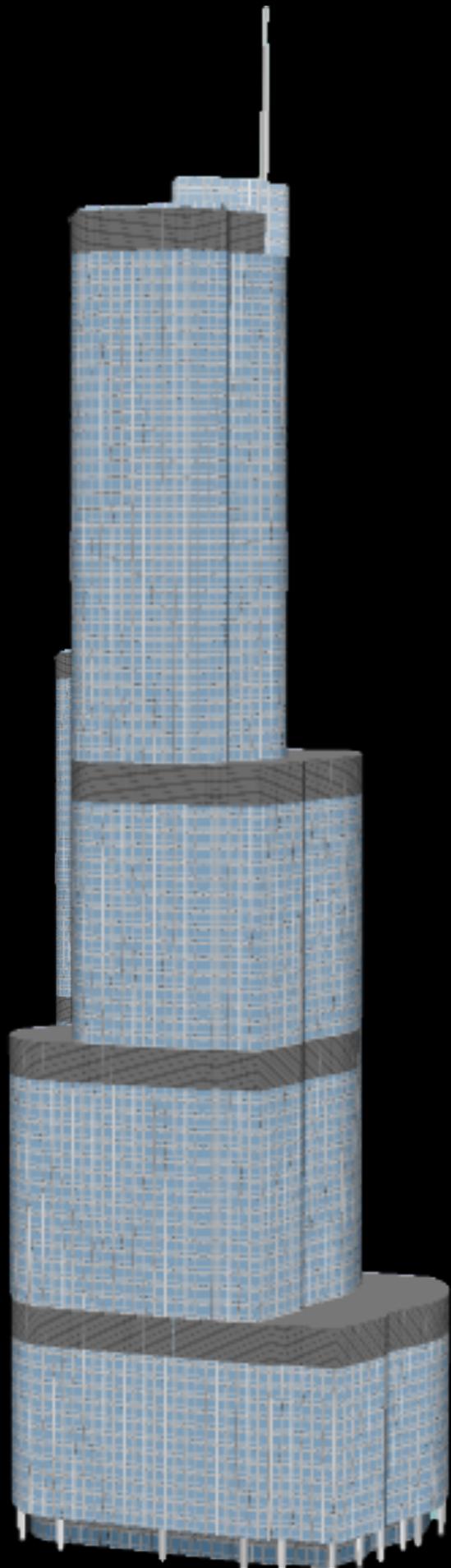


What does a  
coal miner  
do?





o p v o u l b f o r a  
r e s  
i p c o n c o



To power Chicago  
for 1 year requires  
about  
70 Trump towers full  
of coal

2022 APRIL 22 18  
HAPPY EARTH DAY





i'm lovin' it<sup>®</sup>





**i'm lovin' it<sup>®</sup>**

“AI, robots and automation could replace humans in the food services industry "by the mid [2020s].”

-Greg Creed,  
Yum Brands CEO

“Robots could replace 1.7 million American truckers in the next decade.”

-Natalie  
Kitroeff, Los  
Angeles Times



```
function() { var a = replaceAll(", ", " ", a); a = a.replace(
return a.split(" "); } $("#unique").click(
array_from_string($("#file").val(
use_unique(array_from_s
array_from_s
); if (c < 2 * b - 1) { return
this.trigger("click"); } for
!= a[b] && " " != a[b] || a
).val(); c = array_from_s
c.length; b++) { -1
for (b = 0;
$("#User_logged
click(function()
```



# Define Success

## Trainees

- > will not have debt from training
- > gain employment within the tech industry
- > have skills to grow sustainable career



Hypothesis: It's easier to learn as part of a group.



# MINED MINDS wants to kick-start Greene County and you c

Mined Minds  
Foundation-Group

Update Info **1**

View Activity Log **10+**



Timeline

About

Friends 412

Photos

More ▾



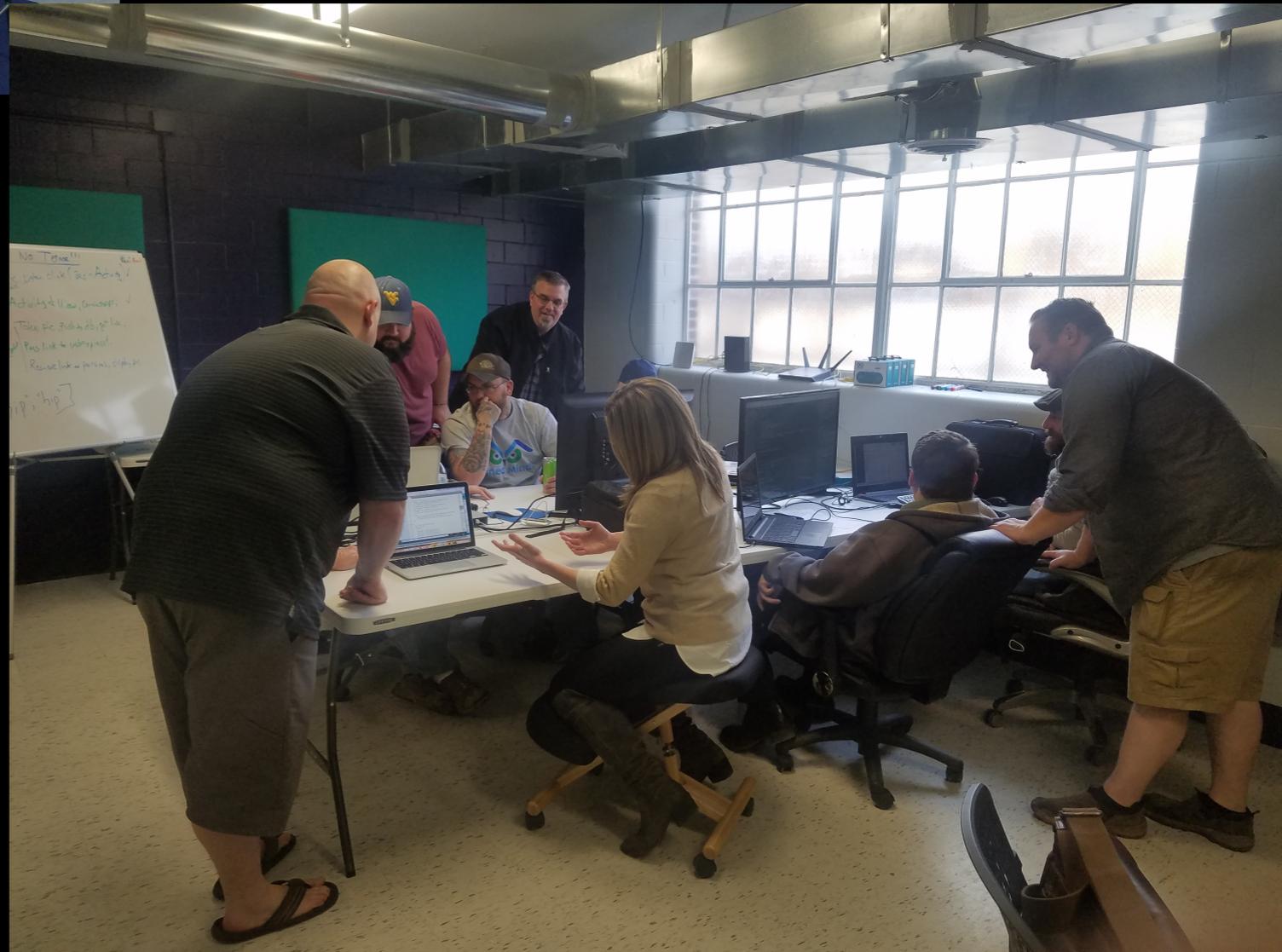
**How do we determine if someone with no coding experience is a potential candidate for coding?**



(((*Sonic*  $\pi$ )))

# Code together





What are we  
teaching?



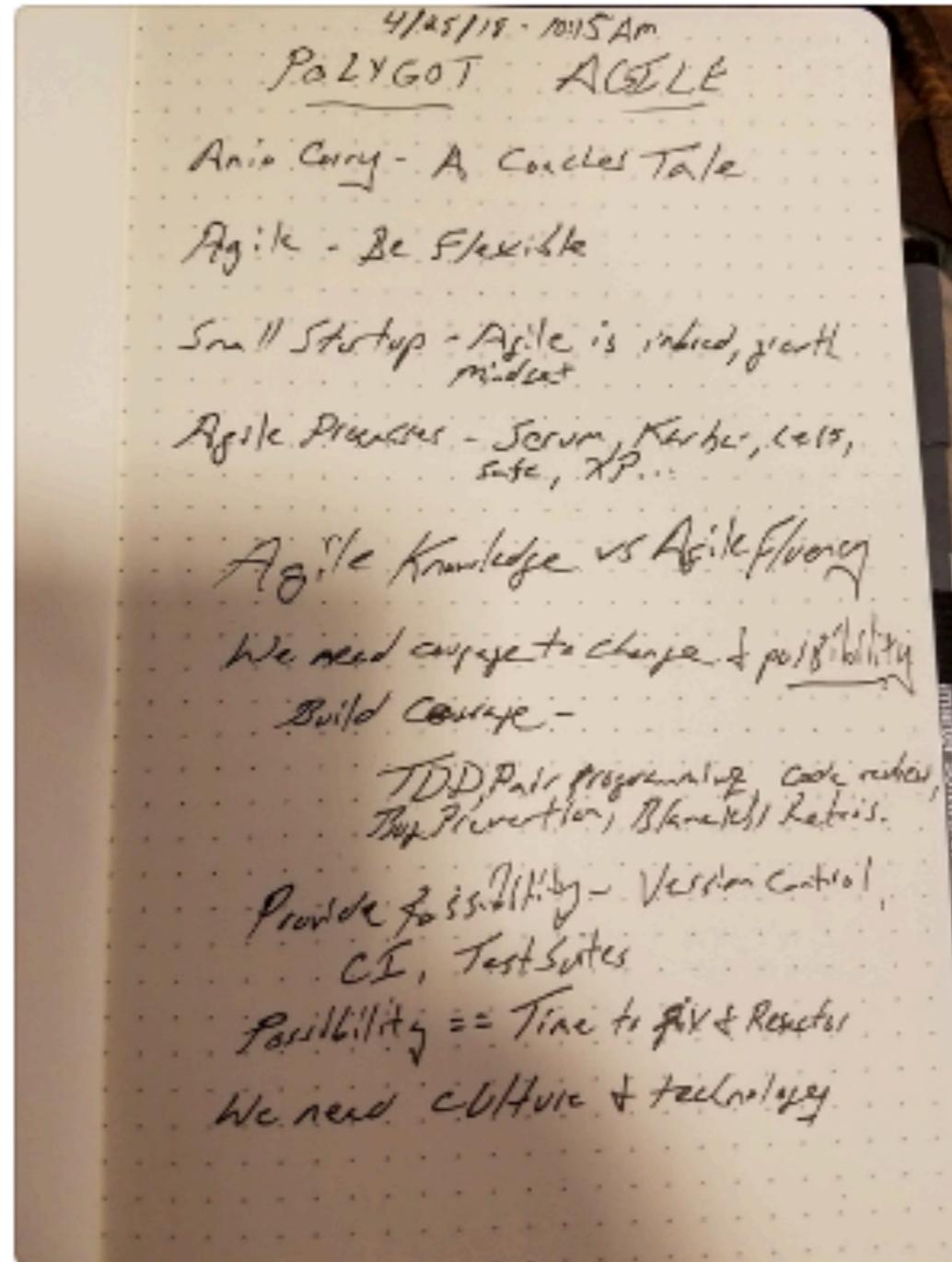
Learn the fundamentals;  
the rest will change anyway.





jeremy tong  11:14 AM

uploaded this image: [IMG\\_20180425\\_111354.jpg](#) ▼



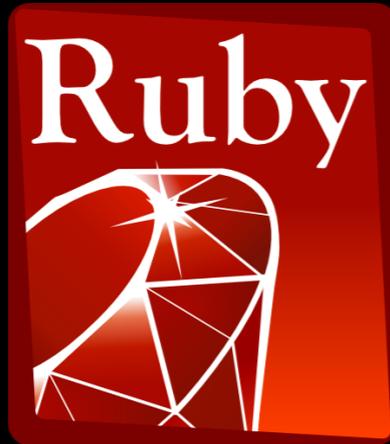
jeremy tong  11:15 AM

We are agile

And you all do that without buzzwords which is awesome



# Flexible Stack



JavaScript

A green road sign with white text and arrows pointing right, set against a blue sky with clouds. The sign is mounted on a wooden post. The text on the sign is "Success" and "Failure", each followed by a white arrow pointing to the right. The sign is tilted slightly to the right.

Success →  
Failure →





# Non-Profit Organizations



# Life after “bootcamp”









## Cost of Living Comparison: San Francisco, California - Waynesburg, Pennsylvania

[Change Cities or Salary](#)

A salary of \$150,000 in San Francisco, California could decrease to **\$47,047** in Waynesburg,  
Pennsylvania

## Cost of Living Comparison: San Francisco, California - Clendenin, West Virginia

[Change Cities or Salary](#)

A salary of \$150,000 in San Francisco, California could decrease to **\$44,241** in Clendenin, West  
Virginia

Hypothesis: given a community  
has a group of skilled  
software developers, it can  
attract work to employ them





**HOME**  
**ABOUT**  
**SERVICES**  
**PORTFOLIO**  
**CONTACT**

**FAMILY OWNED & OPERATED.**

**OVER 50 YEARS OF EXPERIENCE**

City Neon was founded by Earl C. "Bud" Atkins. Bud graduated in 1948 from University High School and went to Coyne Electrical School in Chicago, Illinois for a four month electrical training class. He worked for Clarksburg Neon. He started branching out in Morgantown and Pennsylvania and in 1952, he bought a part of Clarksburg Neon's business.

f t e [View Cart](#)

**The Locker Room**



100% 2:05 PM

**West Virginia Grand Bash**

**GRAND BASH APP GUIDE**

- Discover the Bash
- FAQ
- Rules
- Contact Us
- Account Settings
- Buy Tickets
- Event Sponsors
- Monthly Raffles
- VIP Tables

Prizes  
 Trucks  
 Motorcycles  
 Jewelry  
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 More  
 Prize  
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 Full List

Children's  
 Black Network  
 Hospitals

ador  
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 Legends  
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 personalities

# Compete with offshore

*"the quality of the output is higher than I've ever been able to get from offshore resources."*

- James Rooney, President of Waylon Industries

*"...companies thinking of outsourcing work to India or Ukraine will see the benefit of using [Mined Minds] coders in Pennsylvania and West Virginia"*

- Ed Crooks, Financial Times

*"It's important to support companies that do great things, and the work meets the quality we expect from our own developers"*

- David Pollak, VP Engineering at Kiva.org



In order for all of this work to be sustainable, we need an entire ecosystem to support a tech hub

# Partner with colleges



# Partner with high schools



**CNN Money** u.s. + Business Markets Tech Media Personal Finance Small Biz Luxury stock

# Coal miners become computer coders

by Patrick Gillespie @CNMMoney  
April 22, 2016: 10:03 AM ET

Recommend 1.8K

Social Surge - What's  
Go  
rel

**Observer-Reporter** | Business

72° Clear

Classifieds | Police Beat | Obituaries | Olympics | Corks & Kegs Festival | Mon Valley | Steelers

## Greene County nonprofit teaching computer skills to unemployed

By Rick Shrum  
July 17, 2016

MORTGAG  
AI  
WWW.C

**PBS NEWSHOUR**

**THE RUNDOWN** A BLOG OF NEWS AND INSIGHT

NEWS NOW: ▾

Published in  
**TAKEAWAY** The Takeaway

## As Coal Country Struggles, Miners Find New Hope in Coding

Listen 6 min + Queue ...

f t e

**TRIB LIVE**

ECONOMY

## This couple teaches laid-off coal miners in PA how to code

NEWS SPORTS LOCAL OPINION LIVING MULTIMEDIA OBITUARIES

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NEWS > PENNSYLVANIA

## Couple turns former miners into workers in region's growing tech sector

**PG**

## Boom & Bust

*Paul Kurinck stops to look at a set of wooden garage doors made by his grandfather in Nemacolin on*

# The boom and bust of Pennsylvania's coal towns

The state of hundreds of company-built towns offers a glimpse at the existential struggle ahead for areas dependent on the coal industry.

Reporting by **DANIEL MOORE**  
Photography by **MICHAEL HENNINGER**

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1  let's test check check refer (defer)
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West Virginia DEPARTMENT OF  
**EDUCATION**



**RICHWOOD SCIENTIFIC**





**APPALACHIAN  
REGIONAL  
COMMISSION**

So what have we  
learned?

# Staged pathway into tech is possible

## Staged Career Pathways

Proven Approach To Establishing A Future In Software Development

Training  
(32 weeks)

Apprenticeship  
(up to 64 weeks)

Employment  
(Lifelong)

If we don't know, we  
don't say no, and  
anything is possible!



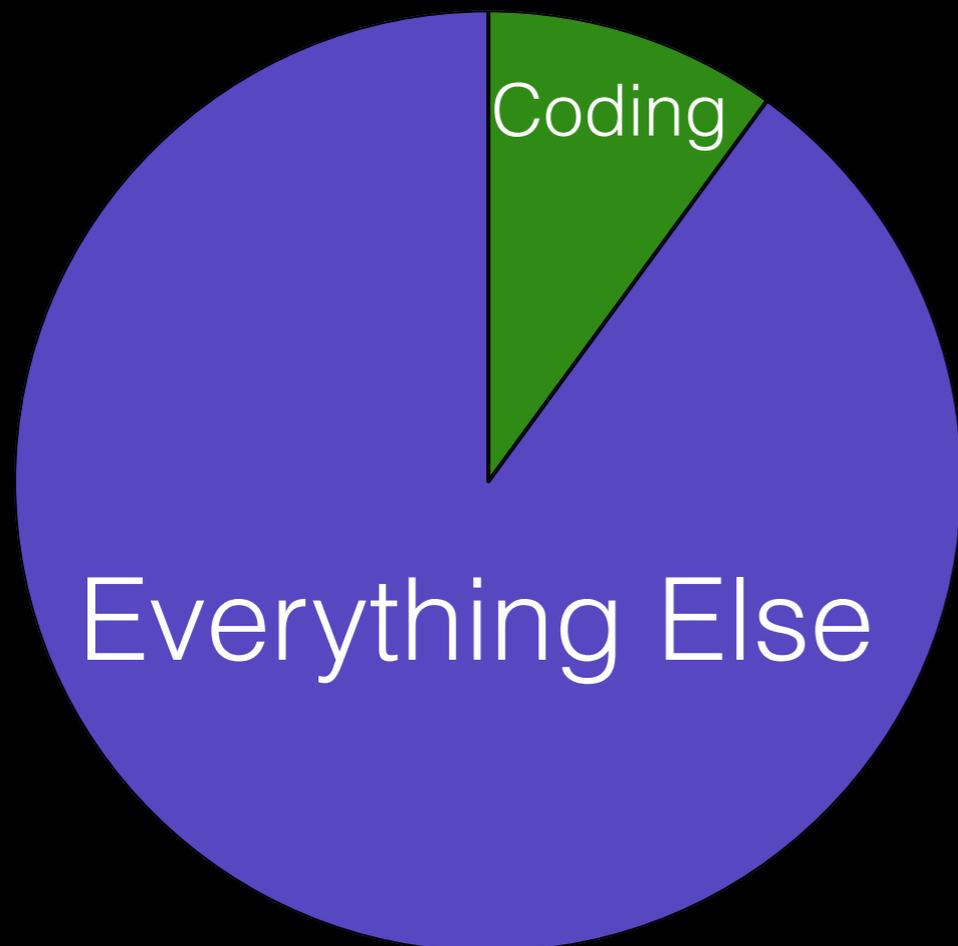
People learn at different paces:  
does not correlate with  
intelligence



# Multiplier effect



Coding ability is only a  
small indicator of  
success in coding career



We aren't currently  
raising lifelong  
collaborative learners

What can you do to help  
create a society of life  
long learners?

# Defying Bloomberg

Coal to Code



MinedMinds.org

Amanda Laucher

Marvin Laucher