Good morning! Is everyone having fun at SCALE?

I'm certainly having a lot of fun. I loved the games night last night, and I love the number of kids running around.

One thing I noticed about SCALE is there's actually a lot of diversity here. I see a lot of women and people of color, and that's really encouraging to me. So I wanted to do a quick diversity poll of the audience.
If you're a male, raise your hand.
Ok, keep those hands up.
If you're white, also raise your hand.
Now, those people with their hand up, repeat after me, "Improving diversity...in open source communities...is my responsibility."

The responsibility for increasing diversity cannot be shouldered by minorities alone.

We all have to do our part to help.
Why? Because we're all privileged in some way.

photo:
https://www.flickr.com/photos/cheesy42/5945217559
Everyone is privileged, including myself

All of us have identities that society values, and some of us have identities that society discriminates against.

Scalzi: White Straight Male is the Lowest Difficulty Setting
http://whatever.scalzi.com/2012/05/15/straight-white-male-the-lowest-difficulty-setting-there-is/

The first step towards correcting power imbalances in our society is to recognize our own implicit biases, to acknowledge our blind spots, our privilege
In open source, we like to use the word “meritocracy”. We say things like “We're completely open and anyone can contribute.” “I only see code, not people.” We assume all ideas have an equal chance of succeeding based on merit, despite who is promoting those ideas. We promote the fact that open source is a meritocracy.

However, there's an interesting from MIT. They gave a group of people a description of a company, and asked them to allocate bonuses to an employee with a described set of successes. They varied the gender of the employee, and whether the company was described as meritocratic.
Promoting meritocracy may encourage unconscious bias.

The links for all these studies will all be in the slide notes, as well as links to organizations & photo attribution links.

http://skepchick.org/2015/04/the-paradox-of-meritocracy/
There's a whole lot of things you can do individually as an ally to improve diversity. However, I want to zoom out and take a broader look at how open source communities can create a welcoming space for diversity. I've watched a lot of different communities try to tackle diversity, and sometimes they lack a systematic approach. They add a code of conduct, but turn a blind eye to known harassers. They try to join diversity programs, but they lack mentors or good documentation for getting started. So I want to talk about a more systematic approach to improving diversity in our open source communities, and that starts with a man called
Abraham Maslow,
In 1943, Abraham was a faculty member at Brooklyn College
son of Jewish immigrants from Russia
Maslow published a paper titled “A Theory of Human Motivation" in Psychological Review

Photos:
http://steinsaga.com/images/brooklyn_college-a.jpg
https://archive.org/services/img/psychologicalrev28ameruoft
No focus on people who exhibited abnormal behavior, Maslow focused on successful people, who had a purpose and accomplished larger goals in life, “self actualization”. These are the sorts of people who are activists (like Jane Adams who focused on women's suffrage), physicists (like Einstein), scientists, and engineers. The sort of people you would want to contribute to open source communities.

Photos wikimedia commons:
Maslow focused on a hierarchy of needs that needed to be met in order for people to reach their life goals. In order for them to gain self actualization, needs from each layer must be fulfilled. Can't focus on being a part of a community if you're hungry or threatened with doxxing.
Level 1: Homeostasis

Necessities to keep the body functioning properly. Breathing, warmth, food, water, excretion

Photo credits:
Tent: https://www.flickr.com/photos/jaako/515523753/
Campfire food: https://www.flickr.com/photos/residae/2806037269
Water: https://www.flickr.com/photos/56218409@N03/14470639002
Level 1: Homeostasis

because everybody poops
(pause for laugh)

photo credits:
toilet:
  https://www.flickr.com/photos/crystal_luxmore/3401601277/
Study showed
70% of Washington DC transgender people have been harassed in restrooms.
Most reported verbal abuse.
9% reported they had been physically assaulted.
18% reported being denied a restroom.

54% had physical complications: dehydration, bladder and kidney infections

http://thinkprogress.org/lgbt/2013/06/26/2216781/transgender-bathroom-study/

Teagan Widmer created Refuge Restroom. Add known gender-neutral bathrooms to Refuge Restrooms! Help out if you're a web developer. Look at the other open source projects coming out of @transh4ck
Maslow defined basic set of needs to keep a body functioning normally. Breathing, warmth, food, water, excretion. But what are the basic needs for a geek to thrive in an open source community? What does homeostasis mean for a geek?
Level 1:
Homeostasis == Deep Hack Mode

(picture build up slide)
Homeostasis for a geek is equivalent to deep hack mode. When you're able to get fully engrossed in an open source project for hours.
What does a geek need for deep hack mode?

Time, with no interruptions
A computer
Electricity
Internet

Photo credits:
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Laptop: https://www.flickr.com/photos/jestermx6/12441584335
Electricity: https://www.flickr.com/photos/gizzmonolzz/13463093534
Ethernet: https://www.flickr.com/photos/opengridscheduler/16267326303
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In open source, we value contributions. Volunteers donating their time to work on a project. Usually the most active contributors are most valued. But there's a specific set of people for whom time is a precious commodity.

Photo credits:
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Ethics of unpaid labor and the open source community


59-75% of women are caregivers of children or relatives, and women of color are more likely to be caregivers.

Part of that may be due to the pay gap, because women of color can't afford childcare.

Women of color on average earn 55% of white men's salary.

Photo: https://www.flickr.com/photos/kongharald/13242684424/
Level 1:  
Deep Hack Mode: Time

- Childcare
- Github inactivity?
- Non-standard entry points
- Openhatch
- Mothercoders

How do we as individuals and open source community members help people who don't have time?

Paypal recharge:  
https://www.paypal.com/us/webapps/mpp/jobs/recharge

Etsy executive coaching for new mothers:  
http://maybrooks.com/a-pilot-program-for-new-moms-at-etsy/

Mother coders: http://www.mothercoders.org/
Level 1: Deep Hack Mode

We assume everyone in the U.S. has a computer
In 2013, 84% of households owned a computer

Photo credits:
Clock: https://www.flickr.com/photos/rhinoneal/5650927834
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Ethernet: https://www.flickr.com/photos/opengridscheduler/16267326303
Deep deparity in who owns a computer
Does this impact how many African Americans and Latin@s we see in tech and open source?

United States computer ownership by race.
Taken from the U.S. census data.
Combined data:
https://docs.google.com/spreadsheets/d/1-kyh679a4dabzDU8aYkMuLnsnveXHb0bdLoDmFsNrLQ/edit?usp=sharing
Deeper disparity in socioeconomic class

Could this lead to open source projects that focus on the needs of the tech elite, rather than the needs of lower class people?
Women are least likely to have access to computers
Sister: the computer is in my brother's room
Mothers give computers to their kids, not themselves

Interviews with women CS majors from Carnige Melon University CS department - in book “Women Don't Ask”

Could the lack of computer access be leading to less women in tech and open source?

photos:
https://www.flickr.com/photos/oddharmonic/991845521
https://www.flickr.com/photos/malabooboo/79246622
https://www.flickr.com/photos/worldbank/14128462812
https://www.flickr.com/photos/joeshlabotnik/2472303070
A laptop that costs less than $200 is likely to be
2 GHz dual core with
2 GB of RAM

photo: http://store.hp.com/us/en/pdp/hp-chromebook-11-g4-(energy-star)-p-p0b78ut-aba--1
Level 1: Deep Hack Mode: Computer Ownership

- Minimum system requirements
- Development servers
- Donate systems to
  - Kids on Computers
  - Computer Reach
  - Free Geek
- Work with the Raspberry Pi team

Kids on Computers & Computer Reach
  Low income people around the world
Free Geek
  Low income people in the U.S.

http://www.kidsoncomputers.org/
http://www.computerreach.org/
http://www.freegeek.org/ (Portland)
http://freegeekchicago.org/ (Chicago)
http://www.unicefstories.org/2014/05/08/raspberry-pi-for-learning-initiative-pi4l/
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In 2011, only 67% of Indian households had electricity
source India census data
In 2015, 1% of Indians had wired internet, but
19% of Indians were mobile internet users
Level 1: Deep Hack Mode: Electricity & Internet

60 KB/sec 2G networks
A 500 MB plan costs 17 hours of pay
1 hour of minimum wage work is enough to pay for
15 clicks on the internet
10 clicks for a new user to file a Launchpad bug

photo: https://www.flickr.com/photos/stefano60/14306580169
Level 1: Deep Hack Mode: Electricity & Internet

- FOSS projects:
  - footprint, docs, async comms
- Tools:
  - handle unreliable networks
- Web devs:
  - reduce bandwidth
- Support Wire The World

The Linux kernel source is 1 GB, and would cost 1 week of pay (34 hours)
git can't handle disconnects

FOSS projects
- Use git submodules?
- Reduce development dependencies
- ship with docs
- use asynchronous communication

matters most - asynchronous, open source alternative to slack - http://www.mattermost.org/

Chrome's data saver mode - disables images, but doesn't work on encrypted sites

Web services need a low-data fallback mode for slow connections
Not going to argue about whether harassment is real, or how prevalent it is
Instead, we'll explore some statistics.
Open source community with 80% men, 20% women
Assume men and women are equally sexist
  Out of 40 men, we have 8 misogynists
  Out of 10 women, we have 2 misandrists
Assume men and women have equal number of chances to be sexist

Petrie multiplier modified from
  http://blog.ian.gent/2013/10/the-petrie-multiplier-why-attack-on.html
Level 2: Security

- **The Petrie Multiplier:**
  Given a gender ratio of 1:r, women receive $r^2$ times as many sexist remarks as men.
• **The Petrie Multiplier:**
  Given a gender ratio of 1:r, women receive $r^2$ times as many sexist remarks as men.
The Petrie Multiplier:
Given a gender ratio of 1:r, women receive \( r^2 \) times as many sexist remarks as men.
Level 2: Security

Men:Women = 4:1
Sexist remark avg = 1:16

Petrie multiplier:
Gender ratio of 1:r
Women receive $r^2$ times as many remarks as men

- Believe minorities when they speak up
- One bad actor disproportionately impacts minorities
- We can't be bystanders
Level 2: Security

- Code of Conduct
  - http://safetyfirstpdx.org
- Don't roll your own
- Pay experts for advice:
  - Safety First PDX
  - Ashe Dryden
  - Frame Shift Consulting

Add don't ask minorities to do the CoC work
We don't roll our own cryptography
- gives people a false sense of security
- papers over the problem
- when it breaks, it hurts the people who relied on it

we don't write our own licenses or cryptography
without experts - why are we writing codes of conduct without experts?

CoC is not a magical checkmark

http://safetyfirstpdx.org/
http://www.ashedryden.com/consulting
http://frameshiftconsulting.com/
Security
So, you want to attract diverse contributors? If 90% of newcomers fail to make a contribution to your project, how can you expect minorities to succeed? How good is your on boarding?

photo: https://www.flickr.com/photos/breakfastpirate/2375709975/
Level 3: Community On-boarding

Is your documentation old or missing?

photo:
https://www.flickr.com/photos/96dpi/3441371058/
Do you leave newbies to explore on their own?

photo: https://www.flickr.com/photos/drainrat/13940904401/
Level 3: Community
On-boarding

Everyone else eventually figured it out!

photo:
https://www.flickr.com/photos/drainrat/13940780541
Level 3: Community On-boarding

- How do I talk to you?
- How do I build your project?
- Release cycle and code freeze deadlines
- Coding style and testing requirements
- Beginner and intermediate-level tasks
- **Documentation and mentors**

This is your problem. You can improve diversity in tech. Don't be a bystander!
Esteem
Recognition
Attribution of work and acknowledgement of success
Level 4: Esteem

In order to gain esteem and recognition, there needs to be opportunity
An invitation
An open door

photo: https://www.flickr.com/photos/hernanpc/16418578245/
Sometimes you have to open the door yourself. This is especially true of minorities because we all have confirmation bias.

photo:
https://www.flickr.com/photos/jorbasa/14784887828/
Level 4: Esteem

We look for people, ideas, and leaders who fit our preconceived notions, and sometimes overlook individuals who don't.

photo: https://www.flickr.com/photos/nanpalmero/14187670430
Level 4: Esteem

Sometimes we let our longest standing open source leaders and maintainers get a little burned out.

photo: https://www.flickr.com/photos/24284031@N00/15831652147/
Level 4: Esteem

When we really should be focusing on growing new contributors and new leaders

photo: https://www.flickr.com/photos/larry1732/14155026679/
Level 4: Esteem

- Succession planning
- Backup maintainers
- Document leadership skills
- Grow leaders outside your network
- Seek out diverse perspectives
- Amplify their voices and accomplishments

Study on African American friends:

75% white Americans don't have African American friends or family
91% of a white American's close social network is also white
Self-actualization - the ability to reach your full potential at what you're passionate about
Level 5: Self-Actualization

For some people, self-actualization means helping others reach their full potential. Maybe it's helping Latin@s get graduate degrees through @MinorityPostdoc. Or helping women of color get into programming with @CodeForProgress. Or helping minorities start in open source with @openhatch. Or protecting software freedom, providing paid internships, and growing open source communities @conservancy & @outreachy.

photos:
https://twitter.com/MinorityPostdoc/status/634576464625704960
https://www.flickr.com/photos/opengov/15901211993/
https://www.flickr.com/photos/mllerustad/16352973574
Level 5: Self-Actualization

But you personally don't need to start some grand project in order to help minorities achieve their goals.

We've talked about a ton of little things you can do, donating computers, reducing your project and website bandwidth req., working on documentation, being a mentor (Outreachy), seeking out diverse voices to amplify.

Ethernet: [https://www.flickr.com/photos/opengridscheduler/16267326303](https://www.flickr.com/photos/opengridscheduler/16267326303)
Writing: [https://www.flickr.com/photos/jjpacres/3293117576](https://www.flickr.com/photos/jjpacres/3293117576)
Mentor: [https://www.flickr.com/photos/jdlasica/11320869875](https://www.flickr.com/photos/jdlasica/11320869875)
Bullhorn: [https://www.flickr.com/photos/perspective/34223937](https://www.flickr.com/photos/perspective/34223937)
Let me tell a story.
My story.
A story about how I was helped by allies in tech, and how I was hurt by people in tech.
Dad - introduced me to my first computer
Packard Bell
Dial-up modem
Jamey gave me a safe space to learn taught me about programming without taking away the keyboard
Andrew
Portland State Aerospace Society
first open source community
projects of my own - USB sensor nodes
Bart Linux kernel encouraged me to present at OSCON coached me on building up my reputation

started searching for ways to improve the lives of others
Karen asked if Linux kernel could be a part of Outreachy.
I became coordinator for the Linux kernel internships
later co-coordinator for Outreachy
began raising issues about harassment and verbal abuse in my community
community members - don't bottle up emotions, implying my emotions didn't matter
conference speakers - wanting to turn the incident into a joke
well-meaning women - making powerful men mad would be detrimental to my career

plenty of people privately supported me but almost no one offered to do anything about it to speak up, to call out harassers

It was clear the people in power were uninterested in changing

I could choose job security or I could choose putting myself at risk for verbal abuse.
So I chose to find a new community, and start over again. Because the individuals in my community failed me.

This story happens to minorities all the time.

It happens because people don't care, or they don't understand minorities lived experiences, or they don't want to take the risk of speaking up, or they're too busy to notice.

The lack of diversity in open source happens because people are bystanders.

I want you to remember what you agreed to at the beginning of the talk.
Improving diversity in open source communities is **your** responsibility

http://tiny.cc/scale-diversity

Thank you

Before I go, I'll note that the slides and resources will be available at tiny.cc/scale-diversity
If you want ask questions, I'll be available at the end of the stage
And finally, I want to pitch the Outreachy internship program

photo:
https://www.flickr.com/photos/grace_land/17505759023/
Resources

• If you've received this slide deck without the notes in the presenter section, please see this post for resource links:
  http://sarah.thesharps.us/2016/01/24/scale-improving-diversity-with-maslows-hierarchy/