

Improving Diversity with Maslow's Hierarchy of Needs

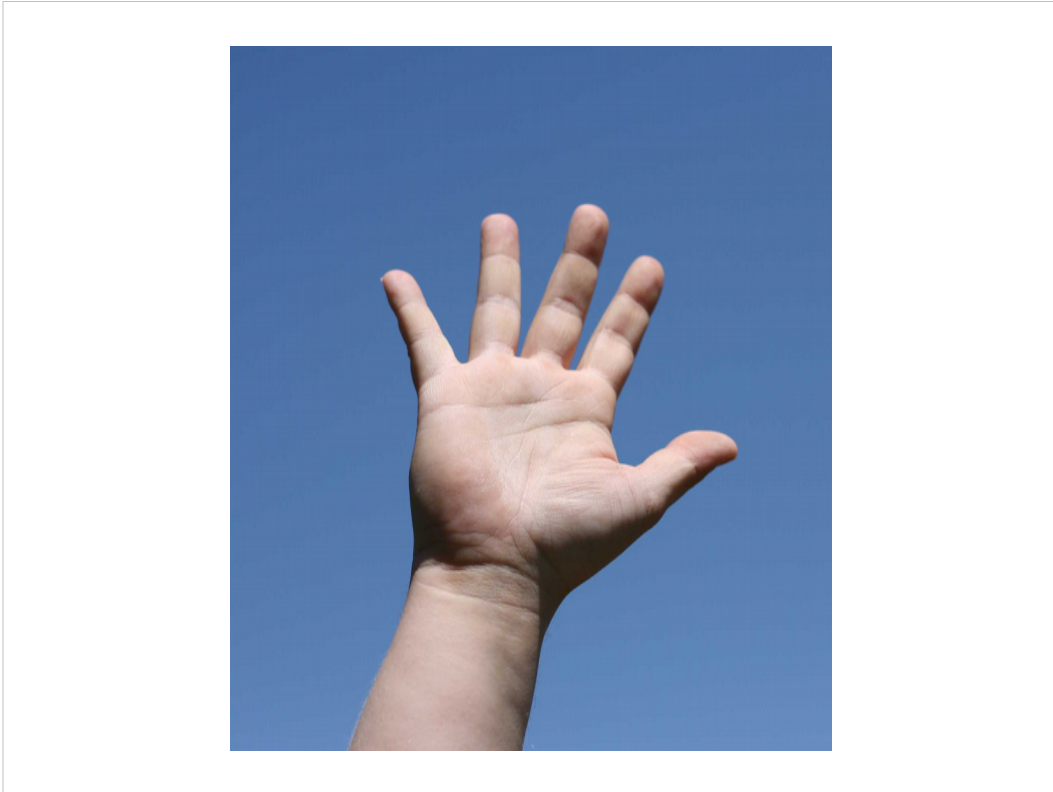
Sarah Sharp
@sarahsharp



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>

white / PoC
cis / trans
straight / queer
fits gender binary / genderqueer
male / **female presenting**
monogamous / polyamorous

religious majority / minority
first / third world
U.S. / rest of the world
citizen / immigrant / first nation
native / non-native language
speaker
city / **country dweller**

young / old
avg height / **short** or tall
avg build / slim or **curvy**
attractive / ugly
right / left handed
normal vision / color blind

PRIVILEGED

extroverted / **introverted**
neuro-typical / **neuro-atypical**
healthy / unhealthy
easy / traumatic life
clean / addict

upper class / lower class
literate / illiterate
test confidence / test anxiety
college-educated / code school
credit / no credit
owner / tenant
no record / criminal record

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

“Meritocracy”

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

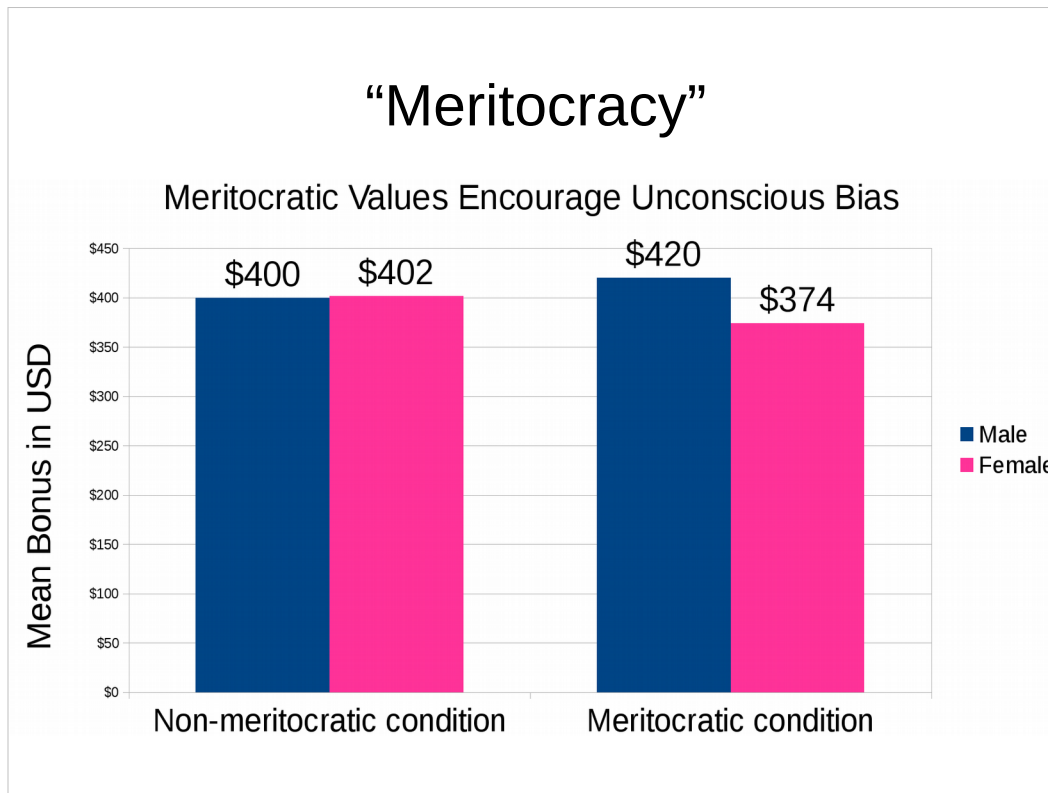
succeeding based on merit, despite who is promoting those ideas.

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.

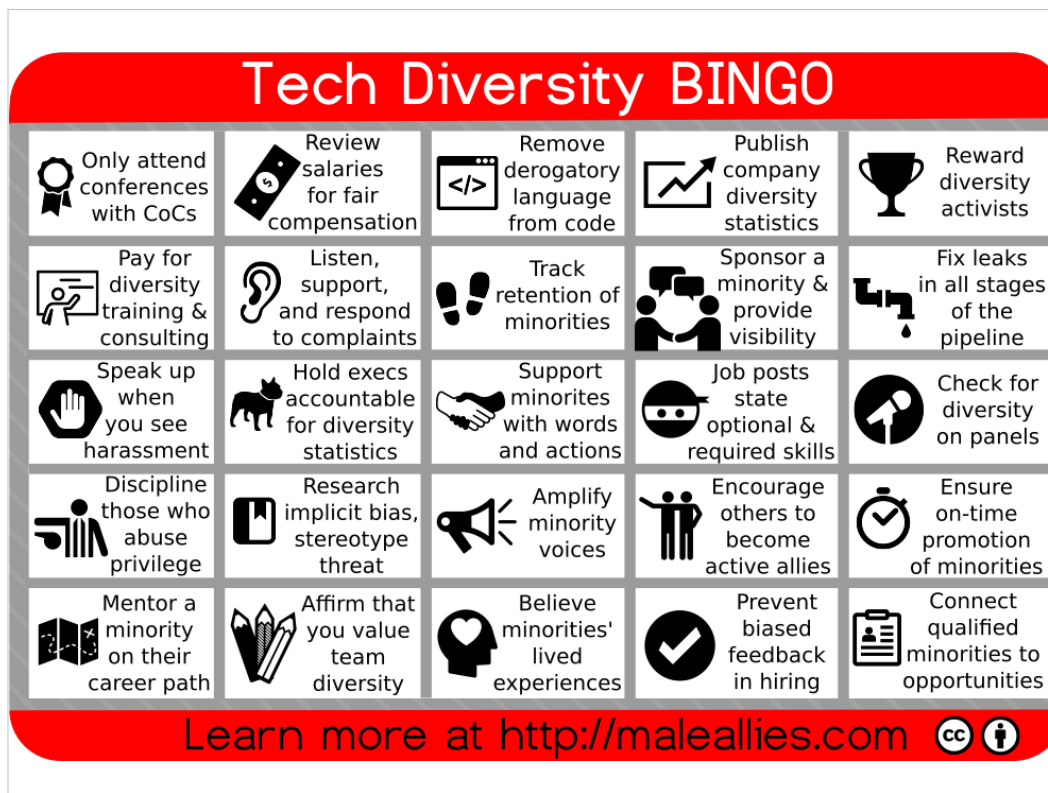


Promoting meritocracy may encourage unconscious bias.

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/>

Castilla, Emilio J., and Stephen Benard. "The Paradox of Meritocracy in Organizations." *Administrative Science Quarterly* 55 (2010): 543-576. © 2010 by Johnson Graduate School, Cornell University



<http://www.maleallies.com>

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 man called



Abraham Maslow,
In 1943, Abraham was a
faculty member at Brooklyn College

son of Jewish immigrants from Russia

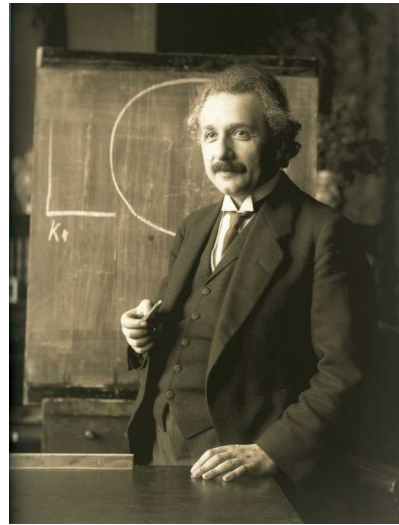
Maslow published a paper titled
"A Theory of Human Motivation"
in Psychological Review

Photos:

https://en.wikipedia.org/wiki/File:Abraham_Maslow.jpg

http://steinsaga.com/images/brooklyn_college-a.jpg

<https://archive.org/services/img/psychologicalrev28ameruoft>



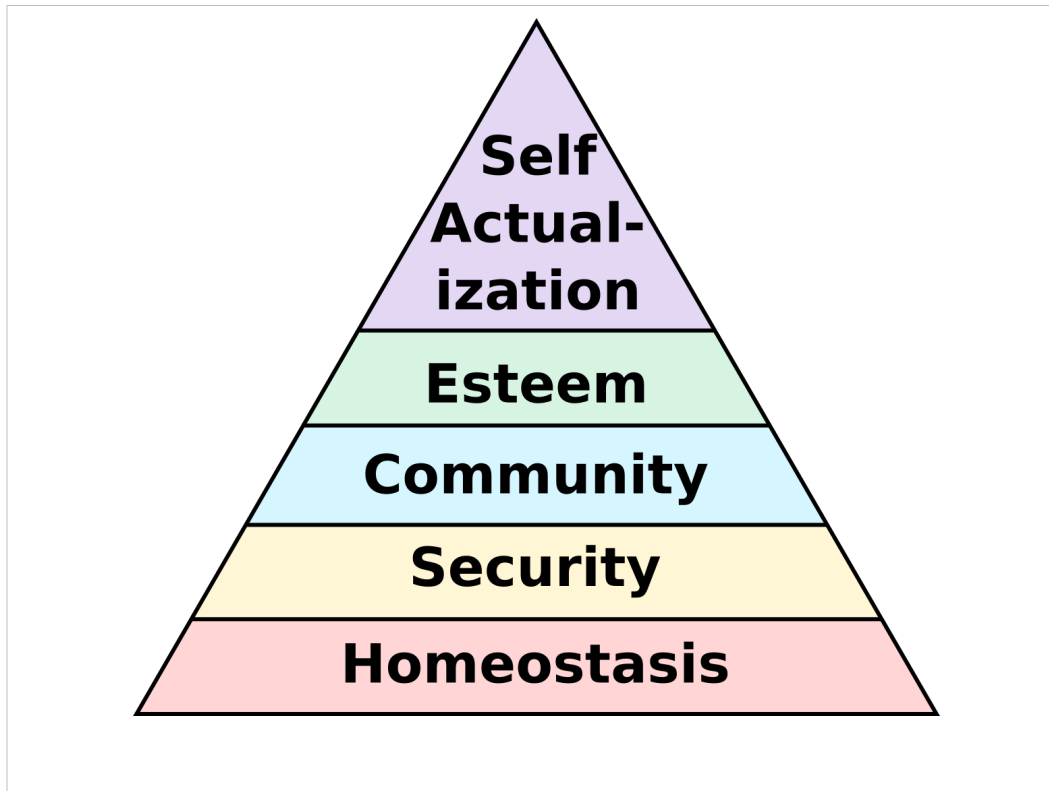
No focus on people who exhibited abnormal behavior, Maslow focused on successful people, who had a purpose and accomplished larger goals in life, “self actualization”.

These are the sorts of people who are activists (like Jane Addams 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:

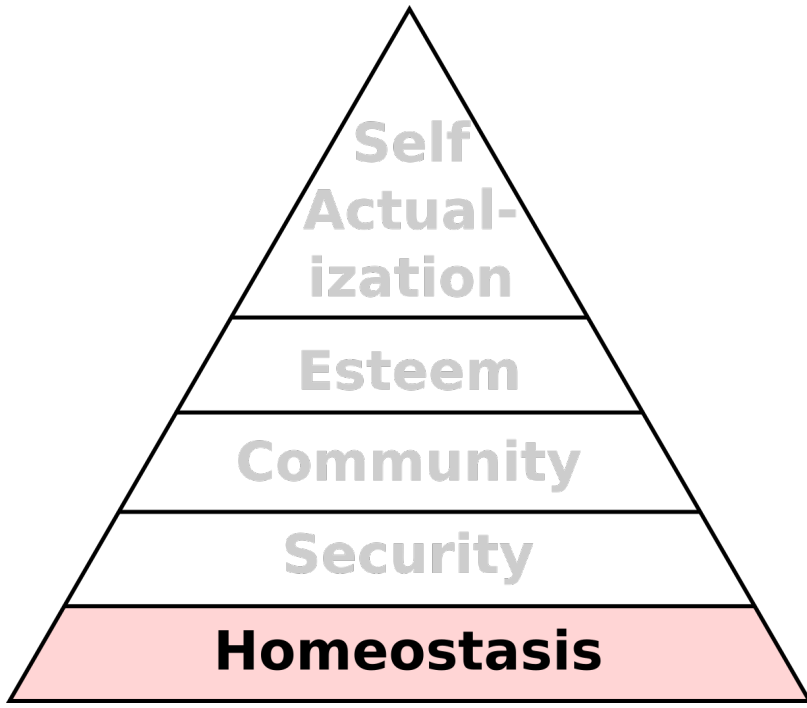
https://en.wikipedia.org/wiki/Albert_Einstein#/media/File:Einstein_1921_by_F_Schmutzer_-_restoration.jpg

https://en.wikipedia.org/wiki/Jane_Addams#/media/File:Jane_Addams_-_Bain_News_Service.jpg



svg CC-BY-SA Sarah Sharp

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. You can't focus on being a part of a community if you're hungry or threatened with doxxing.



**Self
Actual-
ization**

Esteem

Community

Security

Homeostasis

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



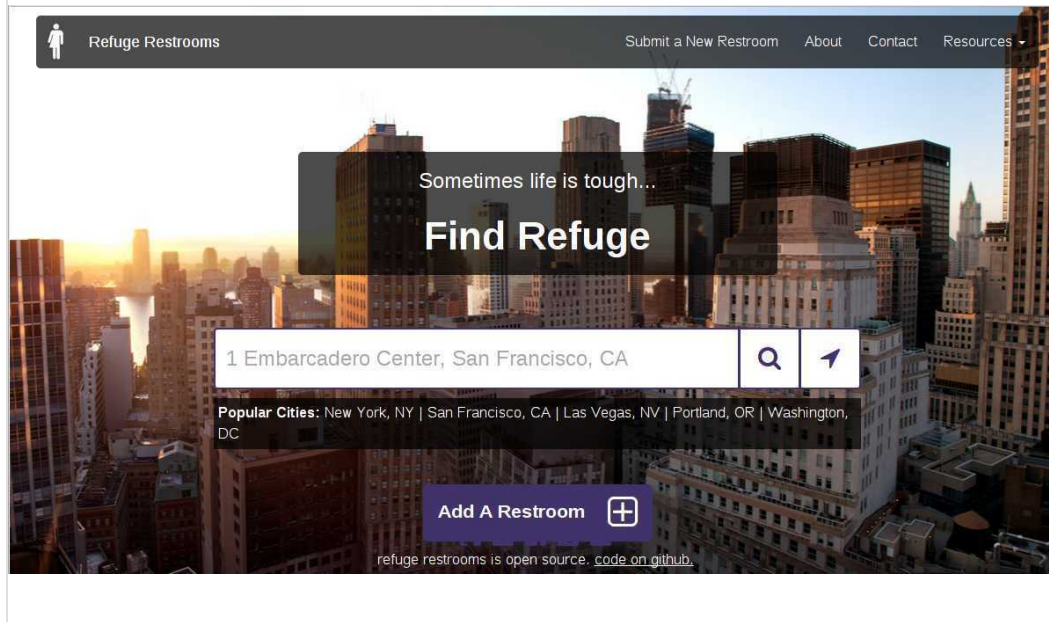
because everybody poops
(pause for laugh)

photo credits:

toilet:

https://www.flickr.com/photos/crystal_luxmore/3401601277/

<http://www.refugerestrooms.org>



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/trans-gender-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

Level 1: Homeostasis



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 means 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:

Clock: <https://www.flickr.com/photos/rhinoneal/5650927834>

Laptop: <https://www.flickr.com/photos/jestermx6/12441584335>

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Ethernet: <https://www.flickr.com/photos/opengridscheduler/16267326303>

Level 1: Homeostasis == Deep Hack Mode



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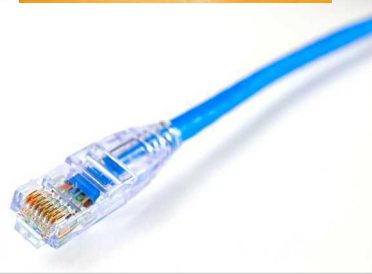
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Level 1: Deep Hack Mode



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:

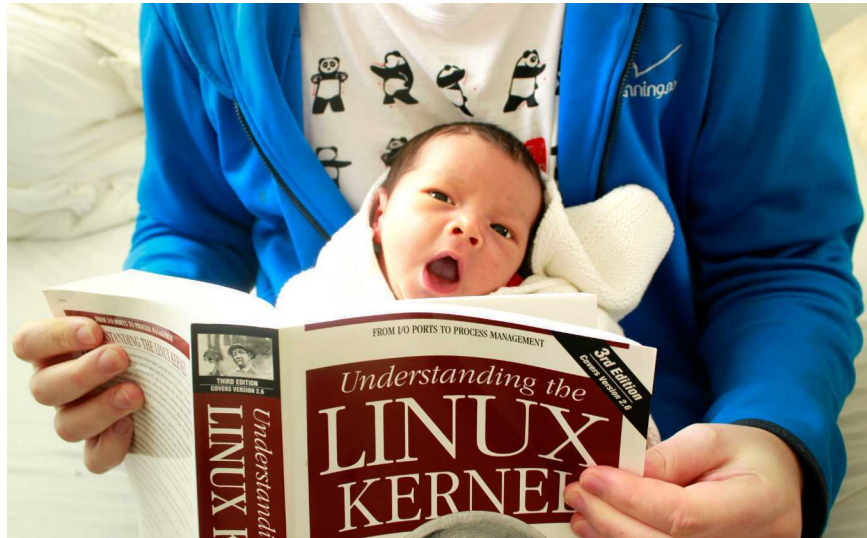
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Level 1: Deep Hack Mode: Time



Ethics of unpaid labor and the open source community

<http://www.ashedryden.com/blog/the-ethics-of-unpaid-labor-and-the-oss-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.

<https://www.americanprogress.org/issues/ext/2013/06/07/65727/the-gender-pay-gap-by-race-and-ethnicity/>

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:

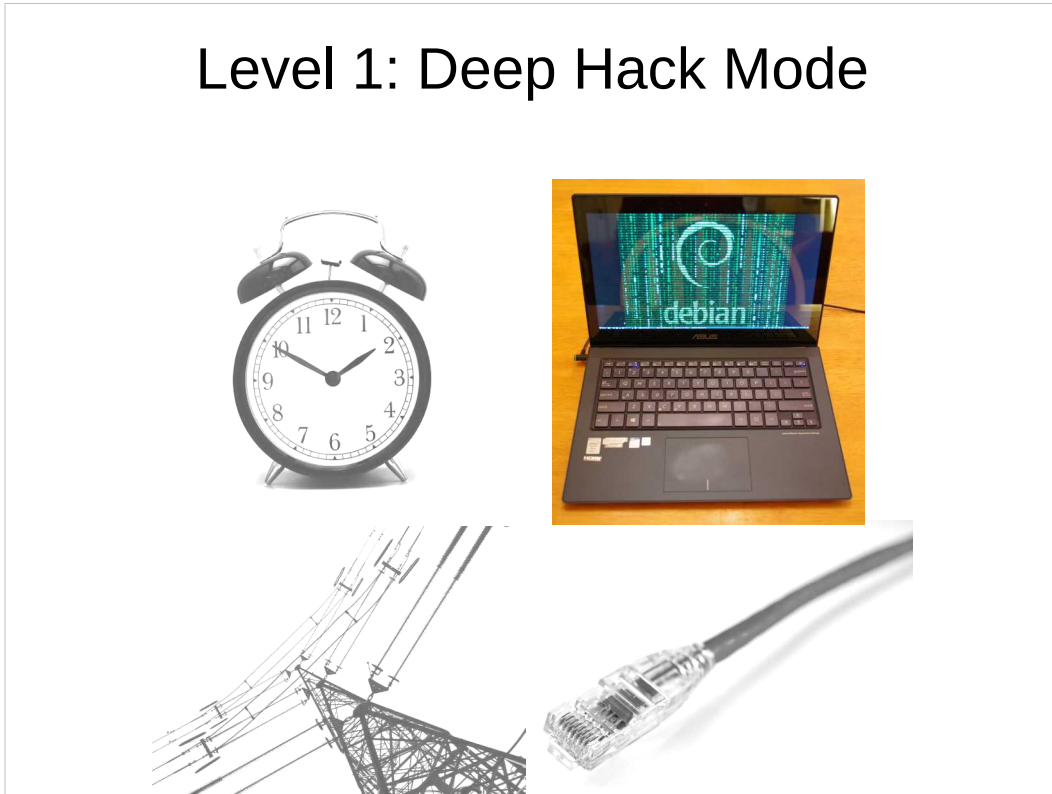
<https://www.paypal.com/us/webapps/mpp/jobs/recharge>

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>

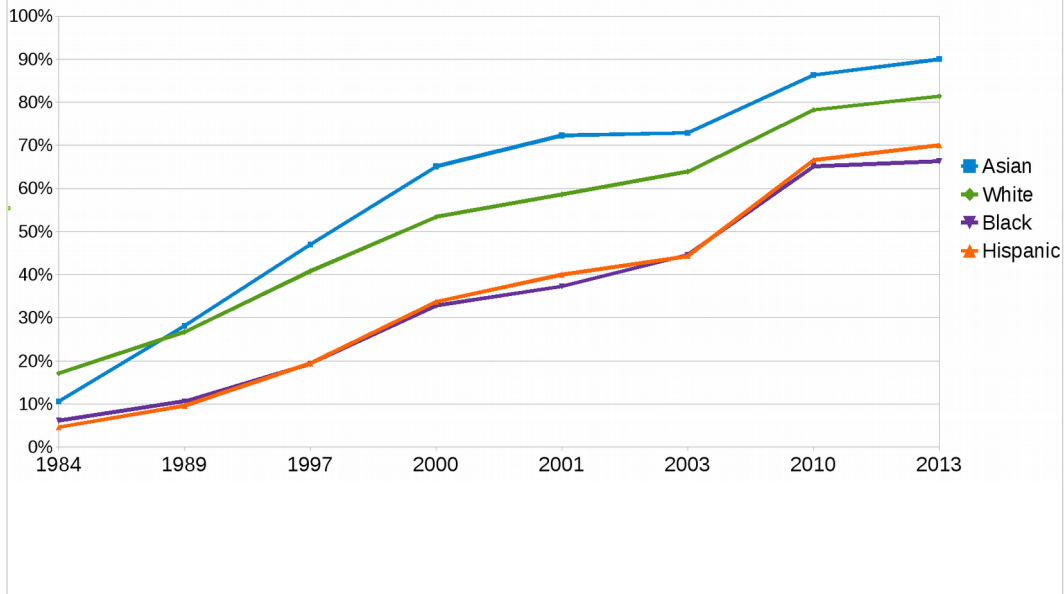
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Level 1: Deep Hack Mode

Racial Disparity in U.S. Household Computer Ownership



Deep disparity in who owns a computer
Does this impact how many African Americans and Latin@s we see in tech and open source?

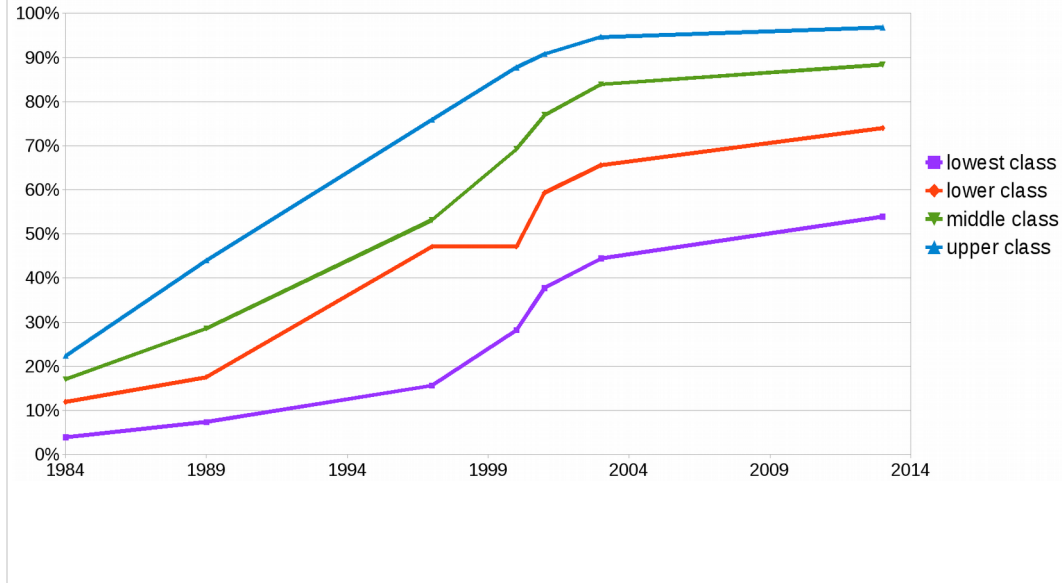
United States computer ownership by race.
Taken from the U.S. census data.

Combined data:

<https://docs.google.com/spreadsheets/d/1-kyh679a4dabzDU8aYkMuLnsnveXHb0bdLoDmFsNrLQ/edit?usp=sharing>

Level 1: Deep Hack Mode

Class disparity in U.S. Household Computer Ownership



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/247230307>

Level 1: Deep Hack Mode: Computer Ownership



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](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-pi4/>

Level 1: Deep Hack Mode



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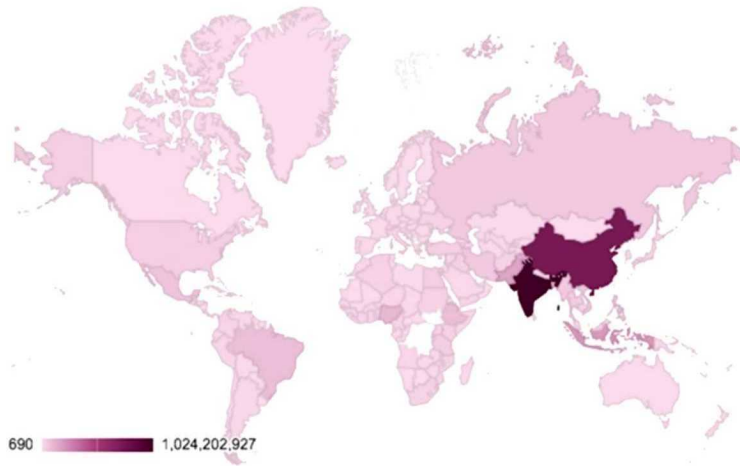
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Level 1: Deep Hack Mode: Electricity & Internet

Number of people not yet online



Graphic taken from

<https://www.youtube.com/watch?v=9jmqsq2OQjc>

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

source : <https://community.data.gov.in/growth-of-internet-users-in-india-and-its-impact-on-our-life/>

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

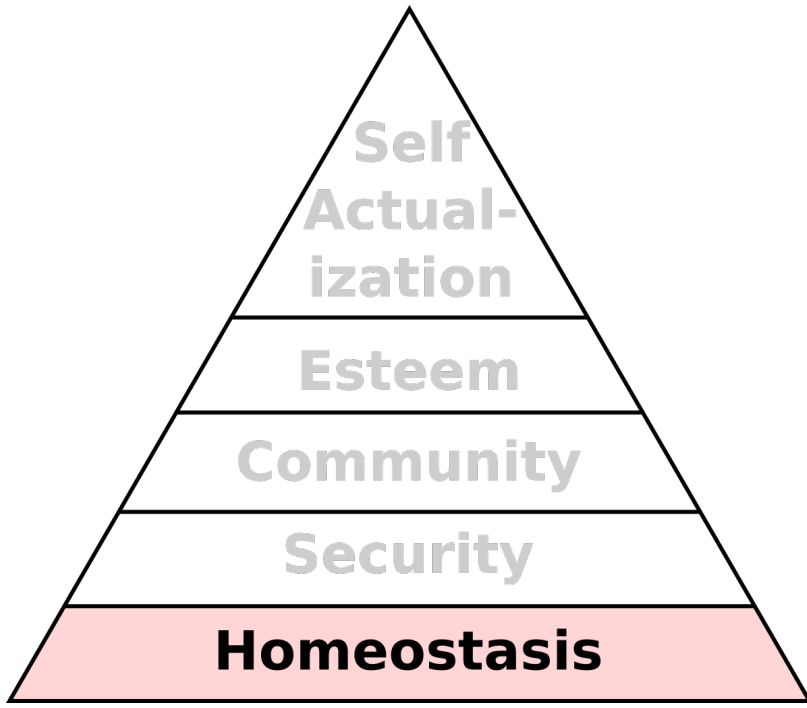
FOSS projects

- 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



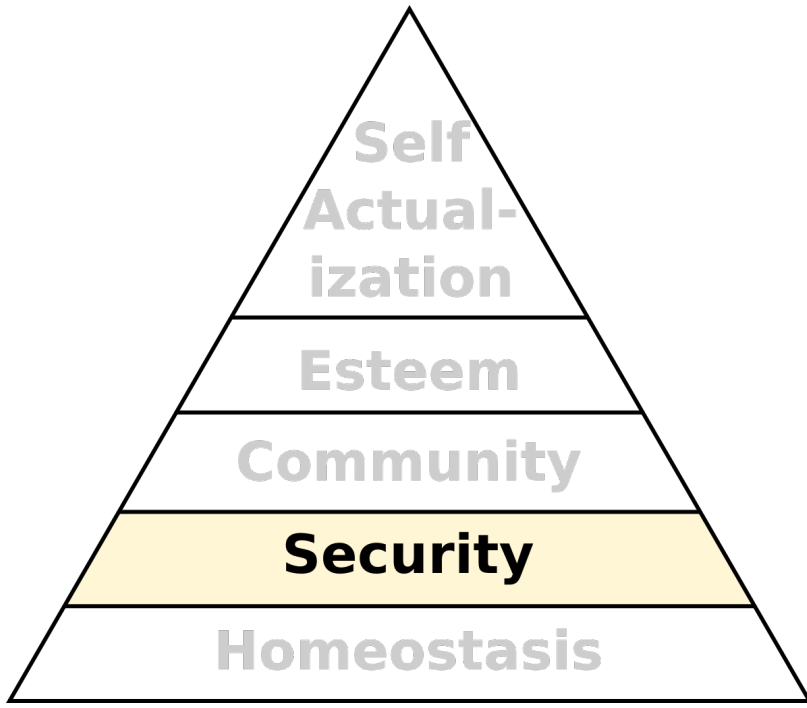
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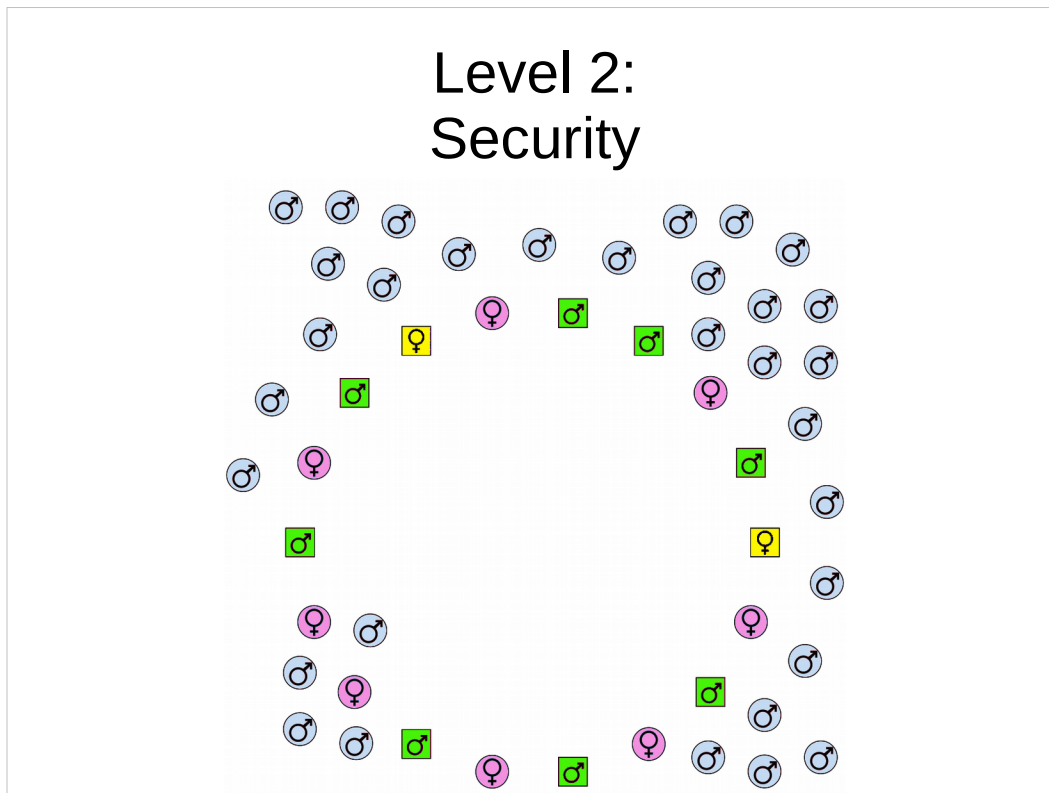
Esteem

Community

Security

Homeostasis





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

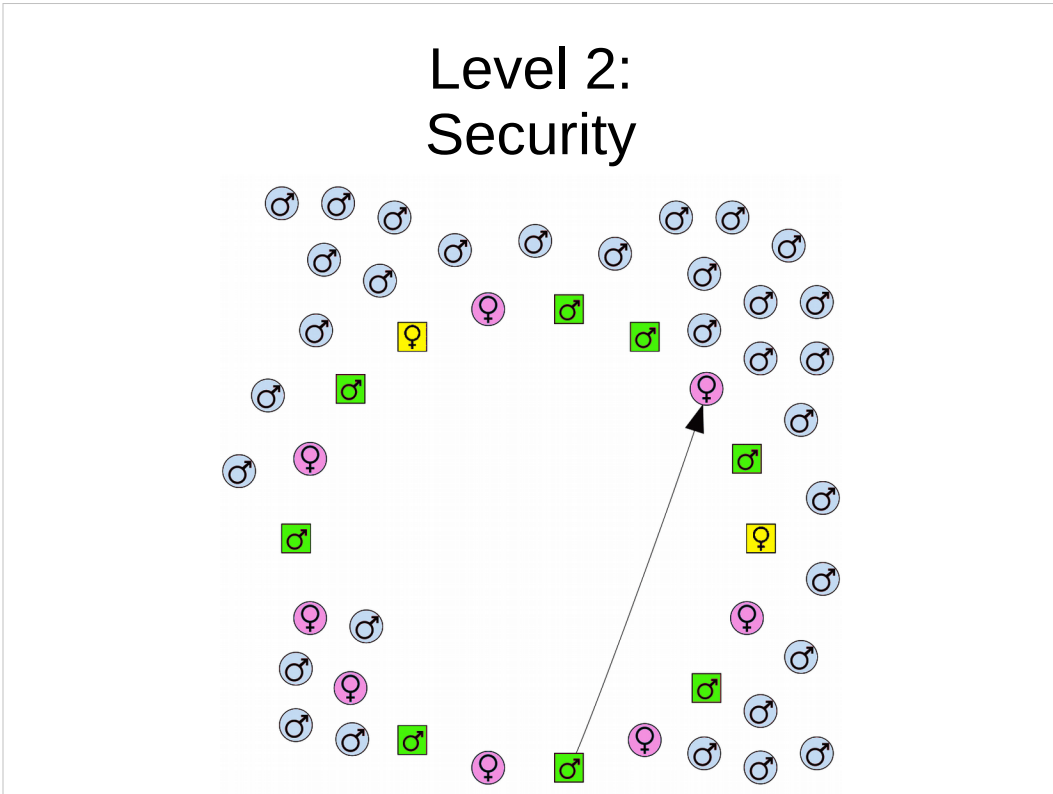
Out of 10 women, we have 2 misandrists

Assume men and women have equal number of
chances to be sexist

Petrie multiplier modified from

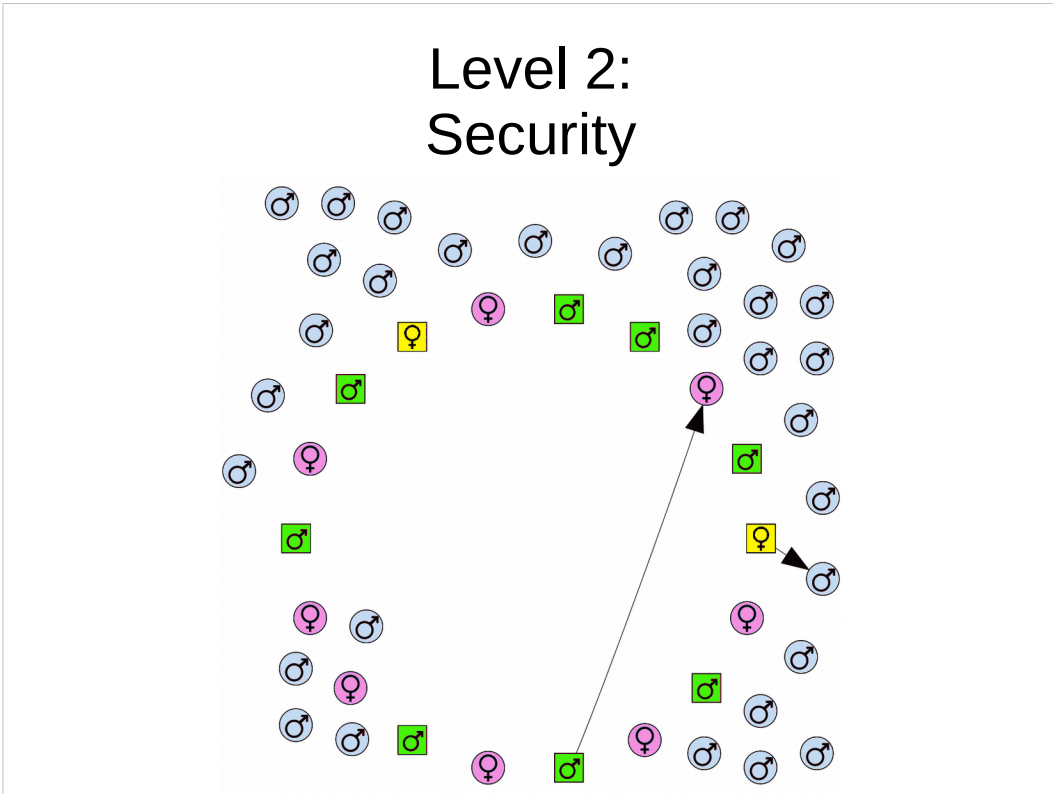
<http://blog.ian.gent/2013/10/the-petrie-multiplier-why-attack-on.html>

Level 2: Security



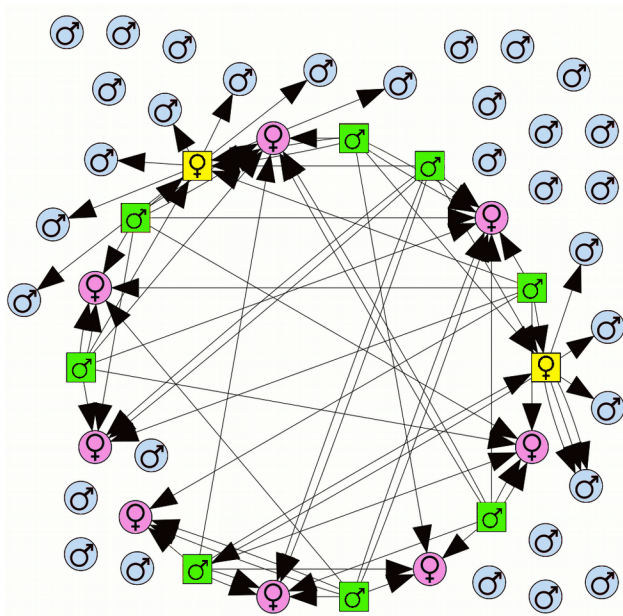
- **The Petrie Multiplier:**
Given a gender ratio of 1:r, women receive r^2 times as many sexist remarks as men.

Level 2: Security



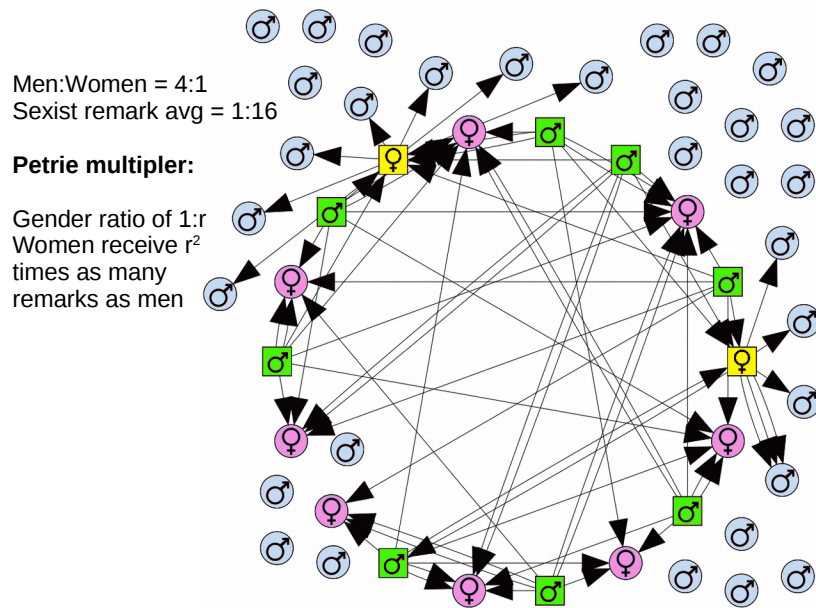
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Level 2: Security



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Level 2: Security



- 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?

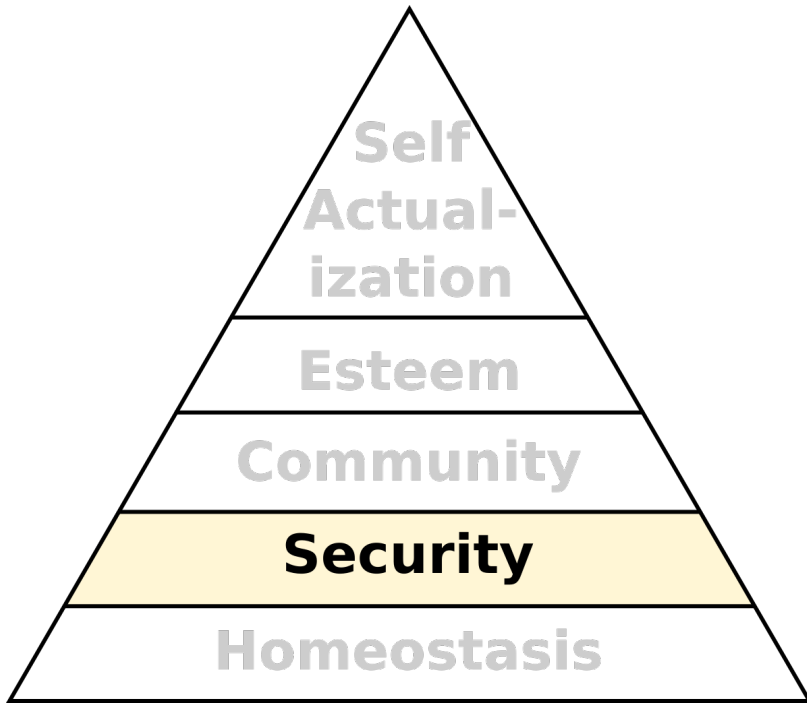
CoC is not a magical checkmark

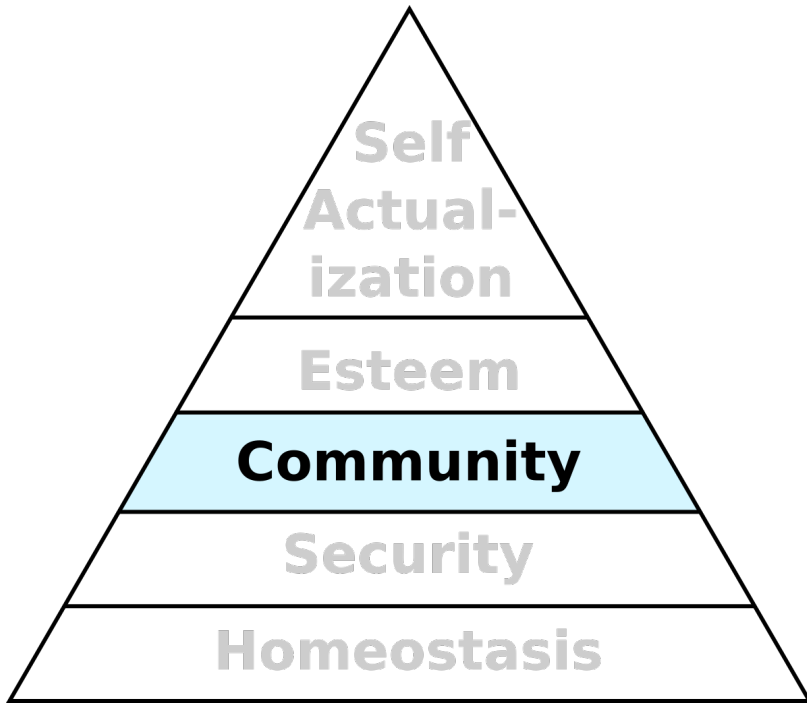
http://geekfeminism.wikia.com/wiki/Code_of_conduct_evaluations

<http://safetyfirstpdx.org/>

<http://www.ashedryden.com/consulting>

<http://frameshiftconsulting.com/>





Level 3: Community On-boarding

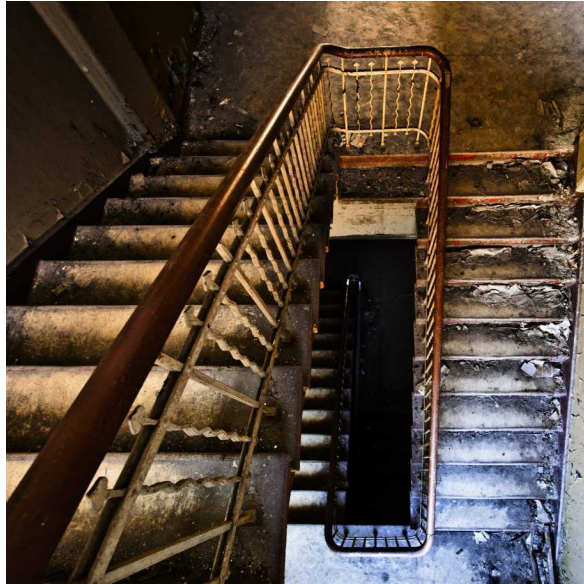


So, you want to attract diverse contributors?
If 90% of newcomers fail to make a contribution to your
project, how can you expect minorities to succeed?
How good is your on boarding?

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/>

Level 3: Community On-boarding

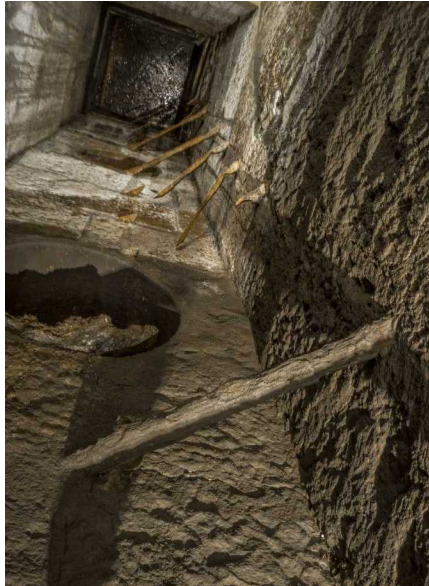


Do you leave newbies to explore on their own?

photo:

<https://www.flickr.com/photos/drainrat/13940904401/>

Level 3: Community On-boarding



Everyone else eventually figured it out!

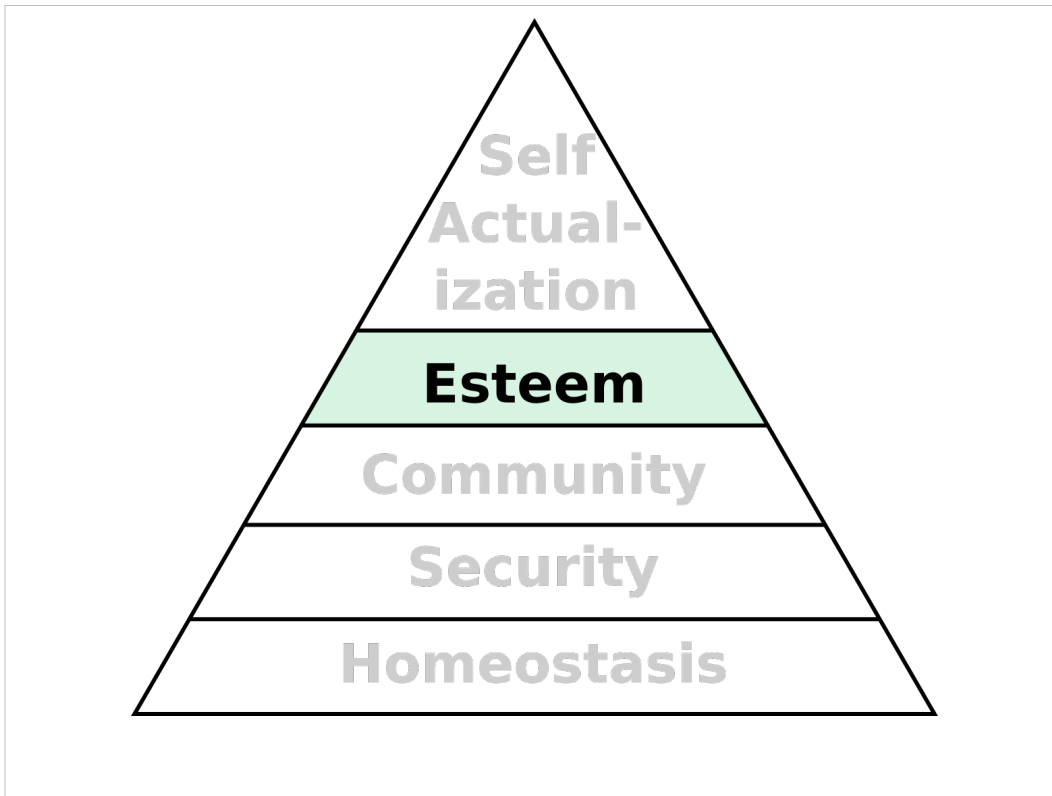
photo:

<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/>

Level 4: Esteem

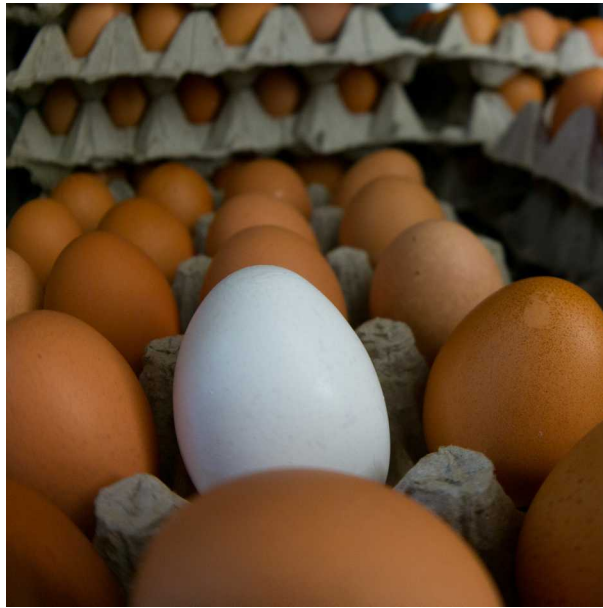


Sometimes you have to open the door yourself.
This is especially true of minorities because we all
have confirmation bias.

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

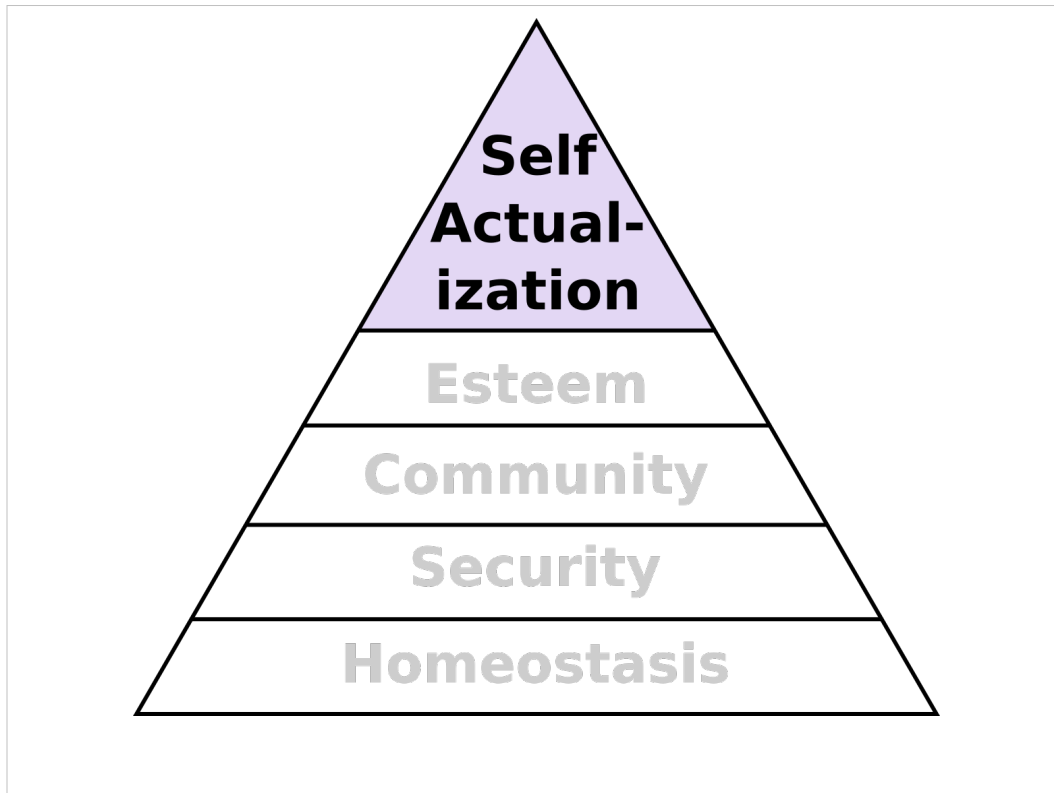
- Succession planning
- Backup maintainers
- Document leadership skills
- Grow leaders outside your network
- Seek out diverse perspectives
- **Amplify their voices and accomplishments**

Study on African American friends:

http://www.huffingtonpost.com/2014/08/29/white-americans-black-friends_n_5733250.html

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

kids on computers: <http://www.kidsoncomputers.org/>

ethernet: <https://www.flickr.com/photos/opengridscheduler/16267326303>

writing: <https://www.flickr.com/photos/jjpacres/3293117576>

mentor: <https://www.flickr.com/photos/jdlasica/11320869875>

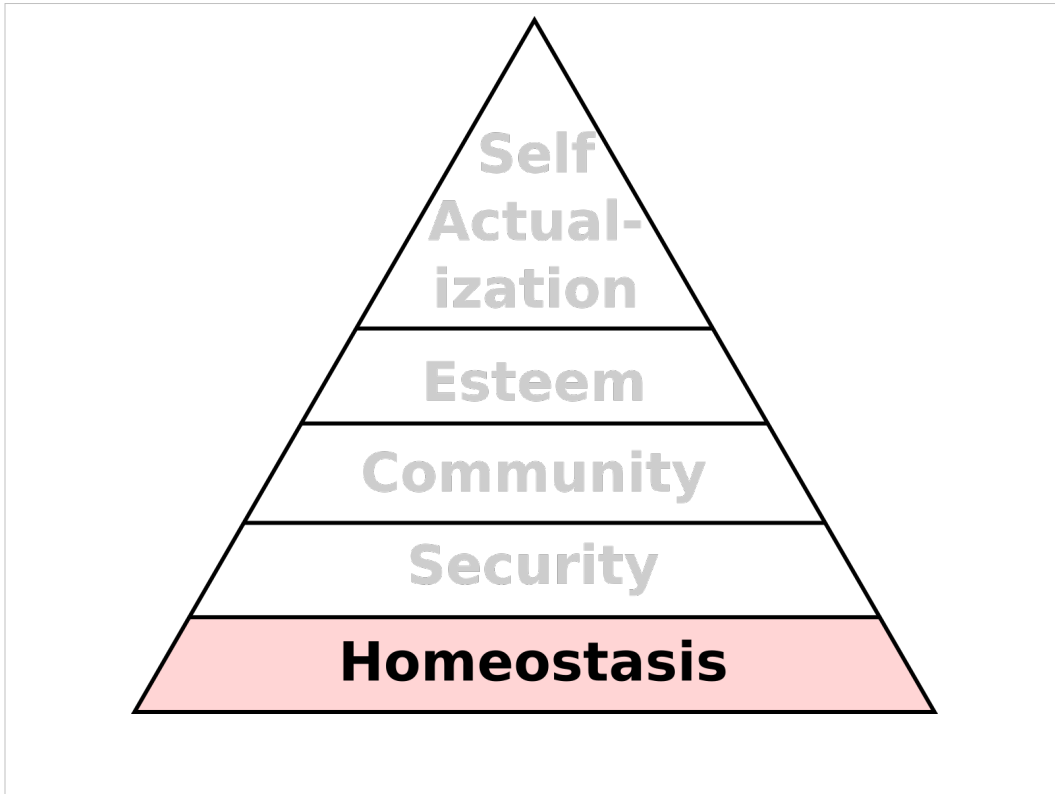
bullhorn: <https://www.flickr.com/photos/perspective/34223937>



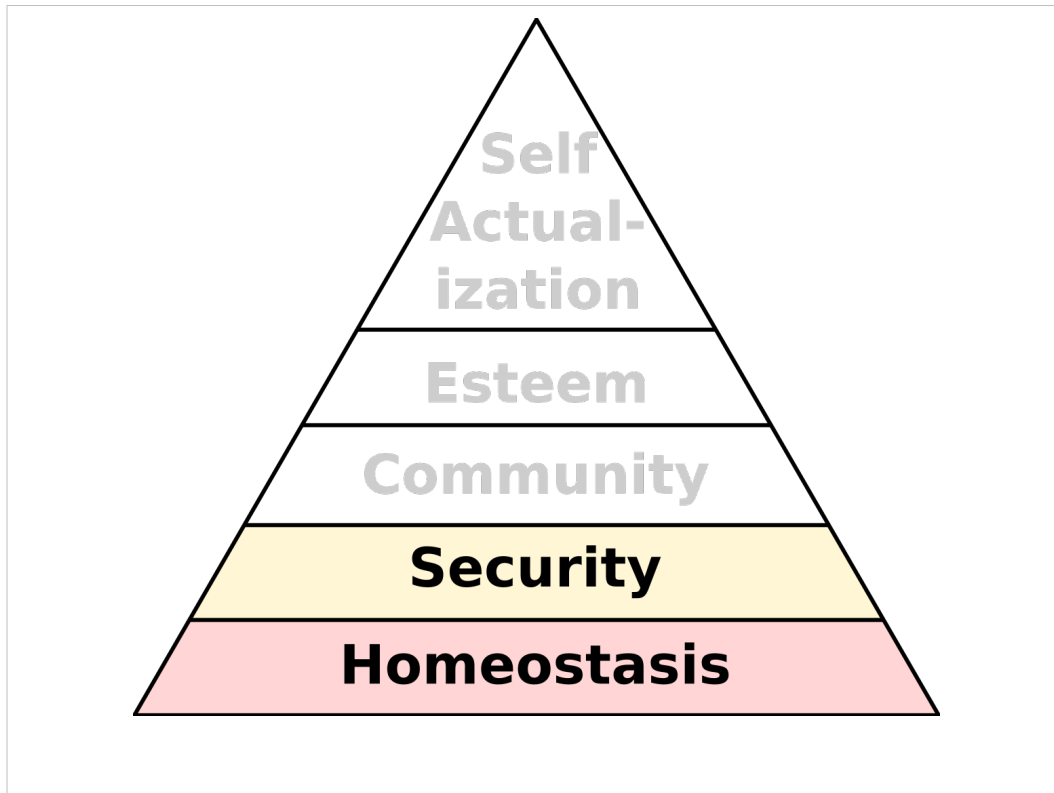
Let me tell a story.

My story.

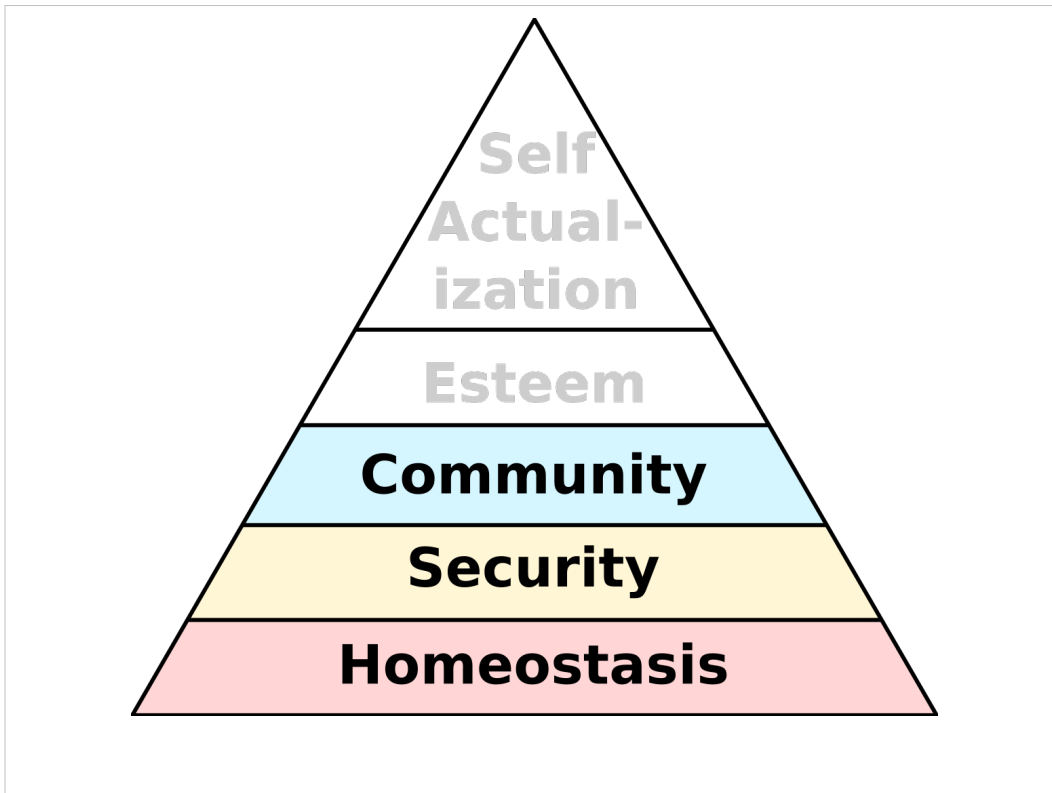
A story about how I was helped by allies in tech, and
how I was hurt by people in tech.



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

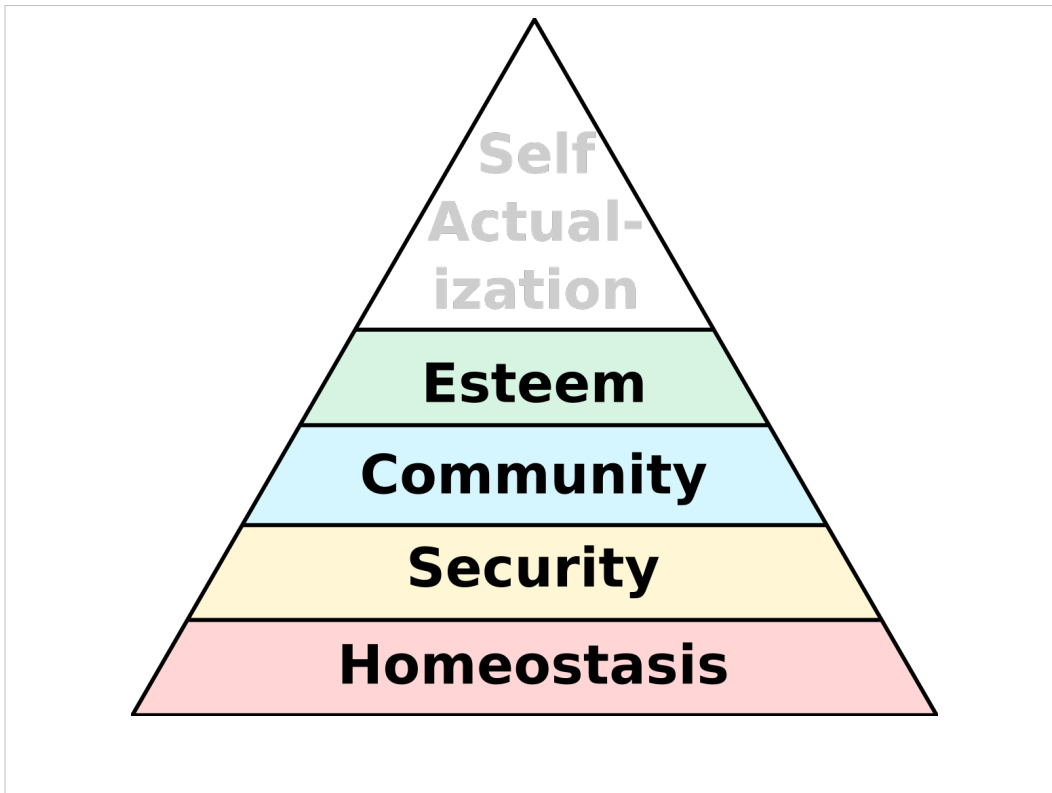


Andrew

Portland State Aerospace Society

first open source community

projects of my own - USB sensor nodes



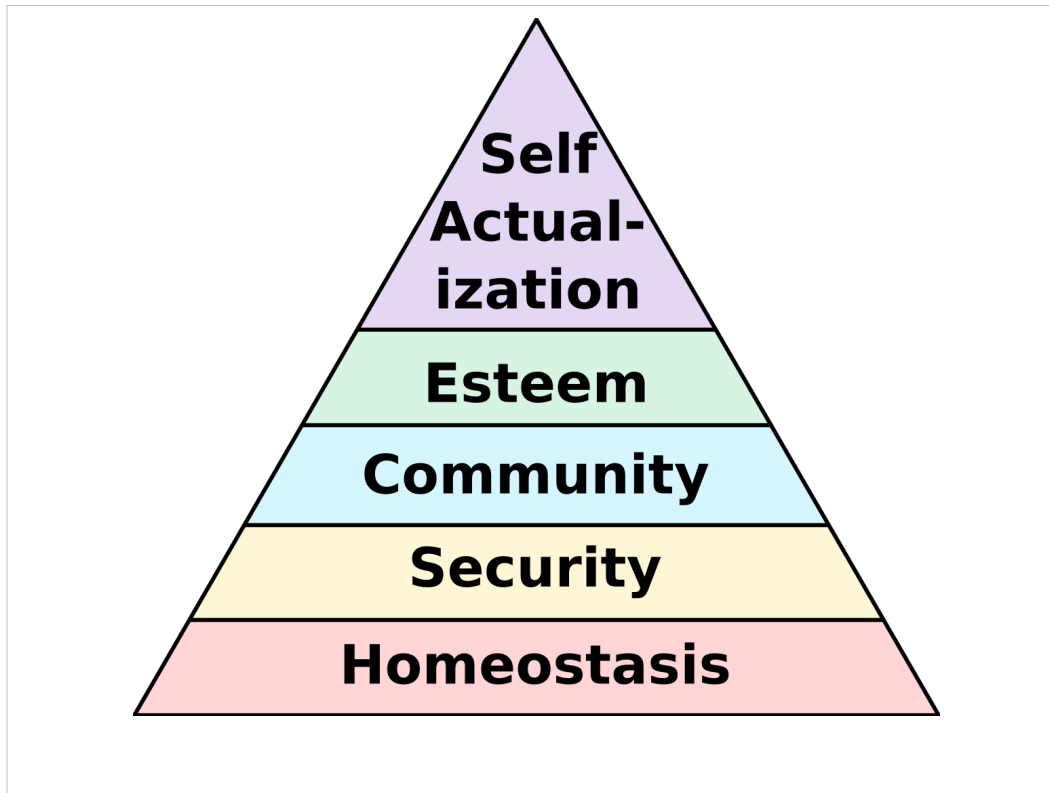
Bart

Linux kernel

encouraged me to present at OSCON

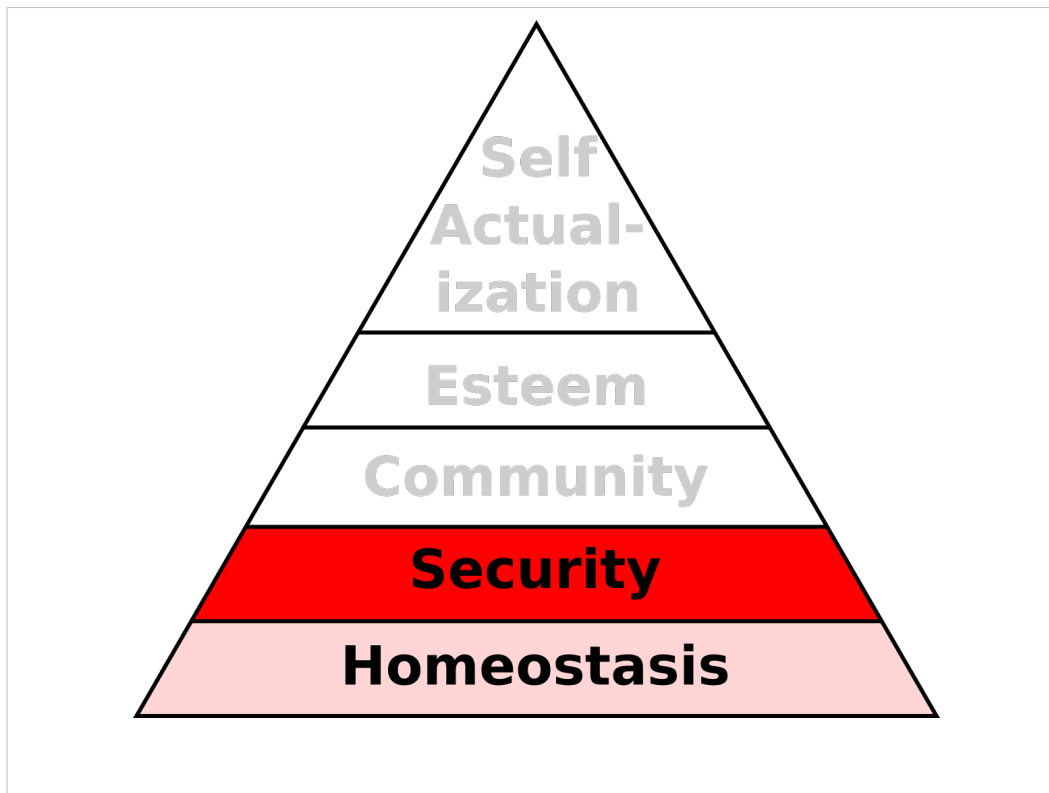
coached me on building up my reputation

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

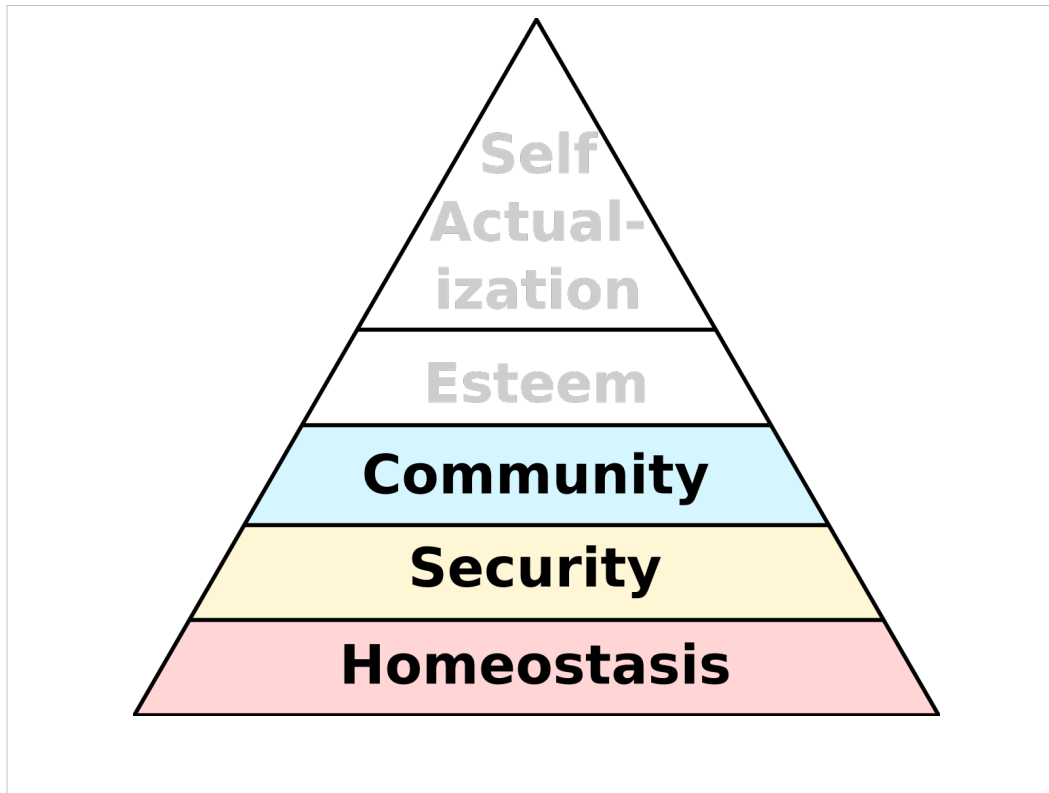


community members - don't bottle up emotions,
implying my emotions didn't matter
conference speakers - wanting to turn the incident into
a joke
well-meaning women - making powerful men mad
would be detrimental to my career

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/>