

# Diversity and Inclusion at JuliaCon and in the Open Source Community

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# Disclaimer

The views expressed in this talk are my own and do not reflect the Federal Reserve Bank of New York or the Federal Reserve System.

# Acknowledgements

Data presented in this talk is taken from <http://opensourceurvey.org/2017/>, unless otherwise noted.

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# Why should we care? Some reasons:

- **Spirit of open source**
  - **Collaboration** between strangers makes open source special
  - Goal of open source is to create **accessible and inclusive** software
- **Project health**
  - Projects with more diverse teams are more successful
  - People who have negative experiences are **less likely to contribute**
- **Opportunity**
  - Working on open source projects helps people **get a job**
  - Gender/race gap in open source is worse than in tech/programming broadly, indicating that **barriers to entry** are higher for women/racial minorities

# The Data (or lack thereof)

- There's not a ton for open source
  - Users omit gender or gender-swap
  - Tension: inclusive environment vs. data collection
- Sources:
  - A few academic papers (see Vasilescu et al., for instance)
  - Surveys
    - GitHub survey
    - To come: NumFOCUS surveys (starting at PyData)
    - Usual survey caveats apply: response bias, smallish sample, etc

# Motivation: GitHub Open Source Survey

- 5,500 users and developers
- Gender:
  - Respondents: 95% male, 3% female, 1% non-binary
  - USA: 22.6% of professional computer programmers are female (BLS)
- Race/Ethnicity:
  - Respondents: 16% belong to ethnic or national groups in the minority in the country they live in
  - USA: 34% of programmers are Black, Asian, and Latino (BLS)
- Sexual orientation:
  - Respondents: 7% identify as lesbian, gay, bisexual, asexual, or another minority sexual orientation
  - USA: 4.1% of population (Gallup)

# Where does JuliaCon fit in?

- Little institutional focus on diversity and inclusion as compared with R (RForwards task force), Python, NumFOCUS, Moore
- We have **minimal, mostly anecdotal** data
  - Tradeoff between inclusiveness and data collection
- Very few women, hispanic/Latino, or black attendees and speakers
- Globally, the Middle East, Africa, and Latin America are very underrepresented
- No data on diversity of sexual orientation, attendees with disabilities, educational background, or other forms of diversity

# JuliaCon 2017 Initiatives (part 1)

- More visible Code of Conduct. Refresher:
  - Don't: harass/intimidate, use offensive/sexual language/imagery
  - Don't encourage any of the above behavior
  - On ALL PLATFORMS: in person, Slack, GitHub, Facebook, LinkedIn, Twitter
  - Report inappropriate behavior to [juliacon@googlegroups.com](mailto:juliacon@googlegroups.com), [erica.moszkowski@gmail.com](mailto:erica.moszkowski@gmail.com), or 646-320-5413
- Friday lunch meetup for individuals who identify as underrepresented in tech/open source/the Julia community (and allies!)
- Outreach to organizations for underrepresented groups
  - Twitter, Facebook, Email, personal connections

# JuliaCon 2017 Initiatives (part 2)

- Anonymous talk proposal evaluation
  - Reduce opportunities for unconscious bias
  - Signals that all applications will be evaluated on their merits
- Reimbursement assistance for diverse attendees/speakers
  - Application: Why do you want to attend? What kind of diversity would you bring to JuliaCon? Could you attend without this assistance?
  - \$10k from the Moore foundation to support diverse attendees + additional funding from elsewhere in the budget
  - We supported conference registration for 16 applicants and travel for 11 applicants – everyone whose application merited it



# What can we (all) do?

- **Write documentation** and open pull requests
  - 93% of respondents complain about this, but 60% rarely or never contribute
  - Most highly valued by women and those for whom English is not a first language
- **Check yourself.**
  - If it seems like it could be problematic, don't do it
- **Address problematic behavior** when you see it (rudeness, name-calling, stereotyping, etc)
  - 18% of OSS respondents had bad experiences
  - 50% of respondents *witnessed* poor behavior and stayed away from projects

# What can we (community leaders) do?

- Give people **tools** for handling incidents: blocking/hiding people, reporting harassment, etc
- Have a prominent **code of conduct**
- For **conferences**: anonymous talk review
- For **employers**: allow/encourage employees to participate in open source on the job if at all possible

# What can we (JuliaCon) do?

- Iterate on what we've learned this year: anonymous talk review, code of conduct, website, etc
- Reach out and invite more individuals
- Birds of a Feather events
- Address diversity and inclusion in the entire Julia community, not just at JuliaCon
- Anything else? Let us know!

# Resources

- [WEPS Gender Gap Analysis Tool](#)
- [How Meetup Ditched Its Boys Club](#)
- [SciPy Conference guide to removing Reviewer Bias](#)
- [Designers, Women, and Hostility in Open Source](#)
- [Designers and women in open source](#)
- [To make conferences more diverse look beyond white men](#)
- [Do Better at Conference Diversity](#)
- [So You Want to Put On a Diverse, Inclusive Conference](#)
- [Getting Women to Speak at your Conference is Hard. So?](#)
- [Would I Attend my own Conference?](#)
- [CSSConf and JSConf Australia Diversity Report](#)
- [Open source diversity efforts gain momentum in 2016](#)
- [Out in the Open: The Crusade to Bring More Women to Open Source](#)
- [Collecting Transgender-Inclusive Gender Data in Workplace and Other Surveys](#)
- [Collecting survey information on gender without alienating trans people](#)
- [Participant selection for workshops and conferences to select for maximum diversity](#)
- [Childcare at Conferences](#) ([KiddieCorp](#))

# Research

## Conferences

- [Gender bias distorts peer review across fields](#) (conference review, PR review)
- [Guiding principles for handling gender on forms](#)
- [How to \(Not\) Ask about Gender](#)
- [Doing UX: Doing Gender](#)
- [Diversity in the R Community](#)
- [Mapping UseRs](#)

## Open Source

- [Open Source Survey by GitHub](#)
- [Paradise unplugged: identifying barriers for female participation on stack overflow](#)
- [Paradise Unplugged: Barriers to Stack Overflow Use for Females](#)
- [Assessing the Attack Threat due to IRC Channels](#)

## General

- [How Queer Scientists are Shaping their Future with a Survey](#)
- [Negative+Math+Stereotypes=TooFewWomen](#)
- [Gender, Representation and Online Participation](#)
- [Tech Leavers](#)
- [Why So Few?](#)

Thanks!