

# Community Diversity + Events: Impacts and Trends

Diversity, Equity and Inclusion MC  
@ Linux Plumbers Conference 2021

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## Disclaimer

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There are many different kinds of diversity.

For the purposes of the talk, I'm primarily discussing gender, race and geographic diversity.

# What Does Diversity Look Like At Open Source Events?

# Events are representative of their communities

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## Communities with less diversity = events with less diversity

One female developer says, “In regards to the open source projects - I’ve been thinking about this recently. I actually haven’t committed to any and it definitely puts a kink in my career... I feel like it’s a circle I can’t get into. But mostly I fear the excessive spotlight of being a sole female programmer on a publicly available project. In light of how women are treated on the internet, this fear does not seem unreasonable.” - Toptal: <https://www.toptal.com/open-source/is-open-source-open-to-women>

“One thing many respondents said drives them away from open source projects are negative interactions such as rudeness, name-calling, stereotyping, and—at the more extreme end of the spectrum—stalking and outright harassment.” - Wired: <https://www.wired.com/2017/06/diversity-open-source-even-worse-tech-overall/>

“U.S. Bureau of Labor data shows that 19.4% of software developers are women, but according to a 2017 GitHub open source survey, 95% of respondents were men and just 3% were women (1% identified as non-binary). The reasons are various, but one key reason may simply be that open source communities can be unfriendly to women developers.” - Inforworld: <https://www.inforworld.com/article/3620290/open-sources-diversity-problem.html>

# Events are representative of their communities

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## **Projects with diversity encourage more diversity**

“This is my first time on a team where there are more than two women on my team. For most of my career, I was the only woman on my team. I got to be on the same team as Carolyn Van Slyck for several months before this one.... I feel a sense of ease and comfort I have never felt before personally and I do think it has something to do with not being a minority both in gender identity and ethnicity. I’m also not the only first-gen American on the team. There are more personalities like mine.” - **Michelle Noorali, Software Engineer, Microsoft; CNCF TOC member and GB member; contributor to Helm, Draft, Cloud Native Application Bundles (CNAB), and Service Mesh Interface (SMI), among others.**

Lack of diversity in your community equals a lack of diversity in your events

# Speakers are representative of attendees

## Women & Non-Binary Event Participants - 2019

LF Member Summit (Leadership Summit)

31% of Speakers

22% of Attendees

Open Networking Summit North America

14 % of Speakers

11% of Attendees

KubeCon + CloudNativeCon Europe

15% of Speakers (including 40% of keynotes)

8% Attendees

Open Source Summit + Auto Linux Summit Japan

15% of Speakers

13% of Attendees

Open Source Summit North America

23% of Speakers

21% of Attendees

Embedded Linux Conference North America

16% of Speakers

14% of Attendees

Open Networking Summit Europe

19% of Speakers

15% of Attendees

Open Source Summit +ELC Europe

20% of Speakers including 11 keynotes

15% of Attendees

KubeCon + CloudNativeCon North America

14 % of Speakers

11% of Attendees

KVM Forum

10.6% of Speakers

9% of Attendees

# Speakers are representative of attendees



**Samson Goddy** @Samson\_Goddy · 3h

Some days back, I had the opportunity to travel to Lyon for the [#OSSummit](#) by [@EventsLF](#). It was terrific talking about the [#opensource](#) we do at [@oscafrica](#), especially with the Open Source Festival. It was fantastic as I turned 20 the next day.

Grateful!!



**Himadri Pandya** @himadrispandya · Nov 5

The proud moment of presenting my [@outreachy](#) project "Improving Linux kernel support for running as a guest on Hyper-V" at [#OSSummit](#) 🧐. Thank you [@linuxfoundation](#) for the opportunity 😊.



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# Speakers are representative of attendees

The screenshot shows the cdCON website with a navigation bar at the top containing 'Attend', 'Sponsor', 'Program', 'Contact Us', and 'View All Events'. Below the navigation is a section titled 'KEYNOTE SPEAKERS' featuring a grid of 16 speaker profiles. Each profile includes a circular portrait, the speaker's name, and their title and organization. Some profiles also include social media icons for Twitter or LinkedIn.

Speaker Name	Title	Organization
Christie Wilson	Software Engineer	Google
Abby Kearns	CTO	Puppet
Tracy Miranda	Executive Director, Continuous Delivery Foundation, The Linux Foundation	
Tara Hernandez	Senior Engineering Manager	Google
Nicole Forsgren	VP of Research & Strategy	GitHub
Gerard McMahon	Head of ECC ALM Tools & Platforms	Fidelity Investments
Charity Majors	Co-founder & CTO	Honeycomb.io
Kohsuke Kawaguchi	Creator of Jenkins and Co-CEO & Co-Founder	Launchable
Kelsey Hightower	Staff Developer Advocate	Google
Afua Bruce	Chief Program Officer	Datakind
James Governor	Analyst & Co-founder	RedMonk
Jennifer Riggins	Freelance Journalist	
Isaac Mosquera	CTO	Armory
Brandon Leach	Software Architect	Autodesk
Rosalind Benoit	Director of Community	Armory
Ramin Akhbari	Principal MTS Architect	eBay



# It's a feedback loop and a self fulfilling prophecy

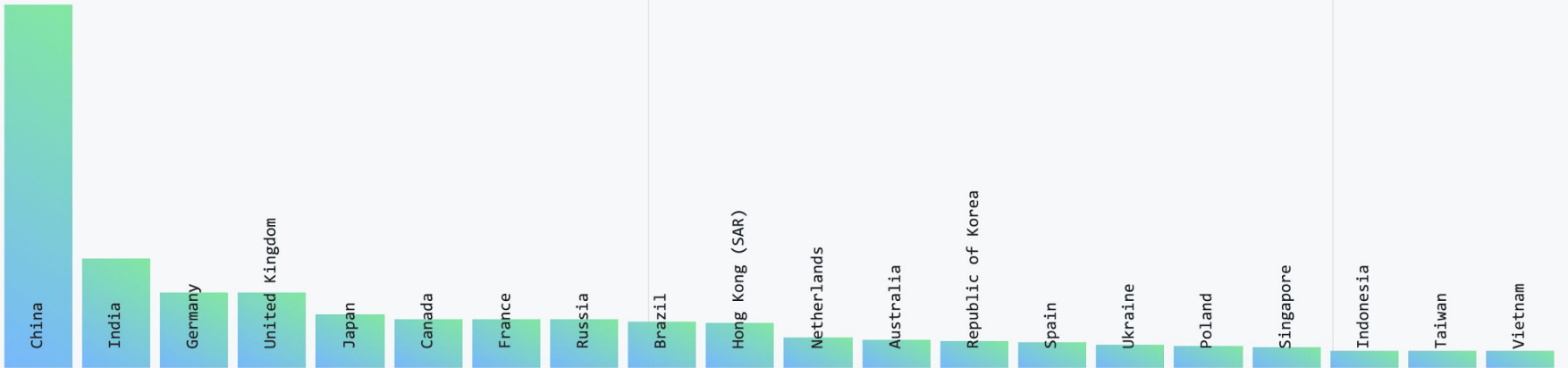
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# Globalization = More Geographic Diversity

## 2019 Event Attendees from 108 Countries

### Top 20 regions outside the US by open source use (clones and forks)



After the United States, open source use picked up speed in China, India, and Germany this year. Developers in China forked and cloned 48% more projects than last year.\*

# Being Geo Inclusive also means meeting others where they are



## 20 Countries in 2019

- |           |                 |
|-----------|-----------------|
| Australia | Japan           |
| Belgium   | Monaco          |
| Brazil    | Russia          |
| Canada    | South Korea     |
| China     | Spain           |
| Estonia   | Sweden          |
| France    | Switzerland     |
| Germany   | The Netherlands |
| India     | UK              |
| Israel    | United States   |

# Do Virtual Events Help Diversity?

# Gender Diversity - hard to say

KubeCon North America 2021 Hybrid		KubeCon North America 2020 Virtual		KubeCon North America 2019 In Person		KubeCon North America 2018 In Person	
<b>Which gender do you identify with?</b>		<b>Which gender do you identify with?</b>		<b>Which gender do you identify with?</b>		<b>Which gender do you identify with?</b>	
Prefer Not To Say	9.21%	Prefer Not To Say	12.49%	Prefer Not To Say	4.00%	Prefer Not To Say	14.00%
Woman	13.09%	Woman	10.45%	Woman	12.00%	Woman	12.00%
Man	77.70%	Man	77.06%	Man	84.00%	Man	74.00%

OSS + ELC North America 2021 - Hybrid			OSS + ELC North America 2020 - Virtual			OSS + ELC North America 2019 - In Person			OSS + ELC North America 2018 - In Person		
<b>Which gender do you identify with?</b>			<b>Which gender do you identify with?</b>			<b>Which gender do you identify with?</b>			<b>Which gender do you identify with?</b>		
Prefer not to say	157	11.48%	Prefer not to say	313	8.96%	Prefer not to say		6.00%	Prefer not to say		4.88%
Woman	318	23.25%	Woman	589	16.87%	Woman		18.20%	Woman		22.81%
Man	893	65.28%	Man	2590	74.17%	Man		75.80%	Man		72.31%

KVM Forum had 8% women attendees in 2019 (in person) and 12% in 2021 (virtual)

LPC had ~7% women attendees in 2019 (in person) and 10% in 2021 (virtual)

# Geographic Diversity - yes!

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**2020  
Virtual**



## Attendees from 137 countries across six continents

59% from the United States

Other countries with a sizeable audience at the event include:

India 7.5%; Canada 5%; UK 3.3%

**2019  
In-Person**



## Attendees from 67 countries across 6 continents

- 80% from the United States
- Other countries with a sizeable audience at the event include: Canada - 4%, Japan - 2%  
UK - 2%, Germany - 1%, Israel - 1%, India - 1%

# Racial Diversity - not enough data yet

OSS + ELC North America 2021 - Hybrid			OSS + ELC North America 2020 - Virtual		
<b>Do you identify as a POC?</b>			<b>Do you identify as a POC?</b>		
Prefer not to answer	232	16.84%	Prefer not to answer	715	20.41%
Yes	208	15.09%	Yes	709	20.24%
No	938	68.07%	No	2079	59.35%

KubeCon North America 2021 - Hybrid			KubeCon North America 2020 - Virtual		
<b>Do you identify as a POC?</b>			<b>Do you identify as a POC?</b>		
Prefer not to answer	1995	21.53%	Prefer not to answer	4136	24.8%
Yes	2087	22.52%	Yes	3634	21.79%
No	5185	55.95%	No	8908	53.41%

# D&I Event Initiatives



# Diversity & Inclusion Efforts Onsite at Events

- › Strictly enforced Event Code of Conduct
- › No All Male Programs, Panels or Keynote Line-ups
- › Scholarships & Travel Funding
- › Child Care
- › Active outreach to women and other under-represented groups to speak at events
- › Venue Accessibility
- › Free non-alcoholic beverages at all social events
- › Non-gender specific event shirt sizing
- › Communication Stickers & Pronoun Stickers
- › Nursing Room
- › Diversity Programming
- › Gender Neutral Restrooms
- › Quiet Room / Prayer Room
- › Women and/or Diversity Social Gatherings
- › Speed Mentoring Program
- › Speaker Inclusivity Training Course
- › Diversity org partnerships
- › Live Captioning\*

# Trend/Non-Binary: Women Speakers

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## **Open Source Summit / ELC / LinuxCon / OSPOCon**

2010: 10% of Speakers

2019: 23% of Speakers

2021: 27.8% of Speakers = 108 out of 388 speakers are women or non-binary

This was not a happy accident.

# Community Funding in 2019

**Over \$900,000 in Travel Funding**

(Diversity - \$715,000 and Need-Based - \$188,000)

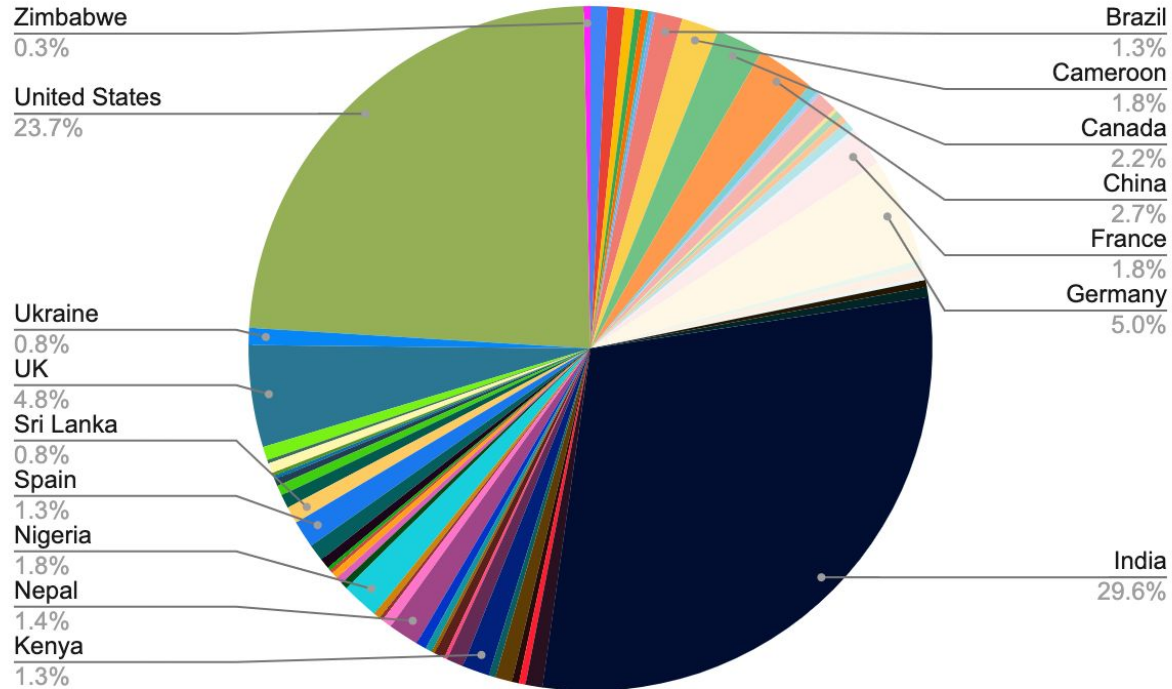
**Funding 638 Individuals**

PLUS

**\$445,000**

EVENT REGISTRATION SCHOLARSHIPS

# Travel Funding Geo Breakdown in 2019



# Event Diversity & Inclusion Initiatives Work

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Why? It shows that you are working to create an inclusive community which in turn creates a more inclusive community. Be patient, It is a slow uphill battle...



# Small Steps Lead to Big Change (Eventually)

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This morning I was on the third of three consecutive panels in which women were a majority of participants. The best part is we weren't even thinking of diversity -- it just happened.

And I think this is because of the mandate that we made as Linux Foundation to no longer have all-male panels. I will admit that in the initial wake of that I was asked to be moderator for all sorts of discussions I knew nothing about, just to make up the numbers. And I think we all dealt with a number of annoyed men complaining.

But in the intervening time, that intention to shine the spotlight on women experts and speakers has meant that I and those around me have a completely rejuvenated list of default speakers in our heads. This is how positive change happens, and I'm proud to be at an organization playing part of that progress.

Just wanted to let y'all know, say thank you, and share the smile on my face.

@lisancao

#OSSummit has **by far been the most passionately inclusive conference** I have been to thus far. From washroom signs, to the abundance of diversity talks, and the people themselves- the commitment to changing the face of #tech has been unreal. I hope other conferences take note!

Chris • @tuba\_man

Been sharing a lot of my #ossummit stuff with my friends and one of them who is just starting in STEM was **really happy to see the intentional inclusivity stuff** that was such a big part of the convention. Feels hella good to be part of that

Lauren Maffeo • @LaurenMaffeo

Attending and speaking at the #OSSummit has been **a huge breath of fresh air**. From stickers for preferred pronouns and nursing rooms/childcare to having a packed room for yesterday's panel about the role of allies in #DiversityandInclusion, **@linuxfoundation kills it**.

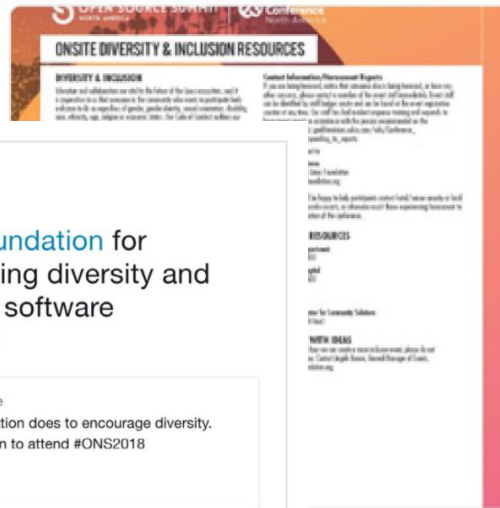
**“ THIS WAS MY FIRST TIME - I WAS SO GLAD TO SEE HOW WELL ROUNDED THE TOPICS WERE THROUGH THE WEEK. NOT JUST TECH BUT INCLUSIVITY AND DIVERSITY WERE DISCUSSED. THANK YOU FOR THE OPPORTUNITY. ”**



To be inclusive at our events, I'll borrow these ideas from **#ossummit**:

- Nursing Room
- Complimentary childcare
- Venue Accessibility
- Quiet Room
- All-Gender Restrooms
- Communication Stickers
- Pronoun Stickers

**#Allyship #InclusionMatters**



 **Jim St. Leger**  
@JimStLeger

Thanks to The [@LinuxFoundation](#) for supporting and encouraging diversity and inclusion in [#opensource](#) software communities. [#ONS2018](#)

 **sujata tibrewala** @sujatatile  
Now this is what linux foundation does to encourage diversity. Scholarship recipients from lfn to attend #ONS2018

10:14 AM - 27 Sep 2018

# Mentorships





# Mentorships

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Events can both be and create mentorship opportunities

1. Speed Mentoring Programs & Small Group Interactions onsite at events
2. LF Live Mentorship Series - created in 2020 to help provide interactive speed-mentorship style discussions to anyone.
  - Goal that this will help increase diverse applicant pool to the LFX mentorship program and to begin making more and more people feel included in open source
  - 21 sessions since Oct 2020, over 5300 registrations
3. LFX Mentorship Program
4. LFX Mentorship Program Mentee Showcase - launching in December

# Wrap-up

# Final Thoughts

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1. Diversity begets Diversity
2. Virtual Events have a clear geographic impact
  - Other areas are hard to trend right now
3. Event D&I Initiatives have an impact
4. Speaker Diversity has an impact
5. You can't fix what you aren't tracking
6. All types of mentorship and helping to pull people 'in' and 'up' help

**Thank you! Questions?**