Diversity and Inclusion in the R Community

Heather Turner

@HeathrTurnr

Forwards taskforce  @R_Forwards

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Background

Action from the community initially focused on women

- heR panel at useR! 2014 raised awareness of gender disparity
  - Forwards taskforce set up in December 2015
  - R-Ladies Global set up in August 2016

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Forwards (est 2015)

R Foundation taskforce to widen participation of underrepresented groups

- Social media
  - Twitter: @R_Forwards
  - Blog: https://forwards.github.io/blog/
- Community
- Conferences
- On-ramps
- Surveys
- Teaching

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Other initiatives - Wider Community

- Conferences/workshops
  - Women in Data Science (est 2015), Black in AI (est 2017)

- Meetups
  - Women in Machine Learning & Data Science (est 2013), Queer in AI (est 2018)

- The Carpentries (est 2018, Equity, Inclusion, and Accessibility Roadmap 2019)

- NUMFocus Diversity & Inclusion in Scientific Computing (DISC) (est 2017)
Other initiatives - R Community

- rOpenSci
  - unconf (est 2014)
  - Community Manager (since 2016)

- Tidyverse developer day (est 2019)

- R Consortium Diversity & Inclusion Working Group (est 2018)
R-Ladies

Currently 188 chapters

R-Ladies Global chapter growth

Number of chapters

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R-Ladies

Chapters spread over 52 countries
Current Challenges

User Community

- outreach beyond white women

Developer community

- widening participation from underrepresented groups
User Community
Underserved Regions
useR! Regional Hubs

- Pilot in Munich this year
- Hoping to scale up next year to include hubs in e.g. Africa, Latin America, Asia
  - reduce environmental cost with maximum in-person interaction
  - reduce financial cost
  - reduce travel time
  - potential to allow languages other than English
  - potential to incorporate remote participation
  - avoid visa issues
AfricaR Community (@AfricaRUUsers)

- Started in 2019
- Newly expanded leadership team
  - Shelmith Kariuki - Kenya
  - Denis Irorere - Nigeria
  - Mohammed Ali - Egypt
  - Ahmadou Dicko - Senegal
  - Anicet Ebou - Ivory Coast
  - Nelda Limilimi - Uganda
  - Vebashini Naidoo - South Africa
AfricaR Activities

- 2019: several new RUGs, two satRdays
- Plans for 2020:
  - Write governing documents (mission statement, CoC)
  - Rotating curator Twitter account
  - Tutorials in French
  - Website (events calendar, blog)
  - Package(s) to address African needs, e.g. NLP package that supports Arabic, Swahili, etc.

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Get Involved

- Follow @AfricaRUUsers
- Share your contacts
  - Potential speakers/hosts for meetups, workshops
- Reuse your talks/workshops
  - Present at RUGs when travelling
  - Offer to present remotely
- Join in with AfricaR plans for 2020
  - Help with organization of community finances?

Tweets by @AfricaRUUsers

Africa R Users Retweeted

Luis de Sousa
@luis_de_sousa
Replying to @datawookie and 5 others
I'd also like to mention R-Ladies Cape Town run great meetups too :) meetup.com/rladies-cape-t… @RLadiesCapeTown

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Minority Ethnic/Racial Groups
The Importance of Community

Dear Danielle,

Remember these incredibly brilliant, talented, and kind women data scientists whenever you feel like “the only one,” on a team or in a space. Thanks to #rstudioconf2020 for bringing us together! #rladies
MiR Community

Medium post by Danielle Smalls-Perkins and Dorris Scott: 
MiR: A Community for Underrepresented Minority useRs

- Conference support: abstract review
- Mi-useR Slack: network and share opportunities
- Social media and blog posts: highlight Mi-useRs
- Mi-useR directory: members, speakers and Rstudio trainers
- MiR dev days: making contributions to the R open source ecosystem
Get involved

- Let people in your workplace/RUG/etc know about MiR
- Join MiR as a minority useR or ally: bit.ly/2unAM8b
- Follow @Dorris_Scott and @smallperks
- Support the MiR initiatives
Disabled and Deaf useRs
R for Blind Users

Jonathan Godfrey has provided many resources

- Let's Use R Now (LURN) e-book for blind users
- BlindRUG mailing list
- BrailleR package
  - text descriptions of graphics
  - WriteR software to produce R markdown documents
- Tips for writing accessible markdown documents

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Accessibility of R Conferences/Events

Liz Hare has been leading the development of best practices for events.

Informed call for proposals for useR! 2021, e.g. asking if venue had:

- step-free access
- disabled parking close to venue
- gender-neutral bathrooms
- policy allowing children on premises

Aim to integrate recommendations throughout organization for 2021.
What you can do

- Educate yourself/others on accessibility
- Expect disabled people at your events
  - including as speakers, chairs, committee members, etc
  - remove barriers to inclusion, don't wait for people to ask
- Give feedback on/help develop best practices
  - (R-specific) advice for creating accessible/inclusive presentations
  - advice for social media managers
General tips for creating inclusive communities

- Organizers: use best practices in your events
  - Noa Tamir is working on guide for meetups
- Expand your network
- Support the initiatives of underrepresented groups
- Share opportunities
- Do what you can to lessen/share the burden
Developer Community
Developer Meetings
Developer meetings co-located with useR!


- Both invited speakers and invited participants
- Mostly R Foundation members, plus special guests
- Prior to useR!

R Implementation Optimization and Tooling

- Open call for speakers, open to useR! participants
- Parallel with useR!

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Barriers to Inclusion

Invited workshop

- Special guests can feel out of place
- Community members that would be interested are left out
- Information is not shared

Satellite meetings

- Not same effort to reach out to underrepresented groups
- Very little promotion to general community
- Details hidden away on separate website

Hard for people from underserved regions to get involved
Work in Progress

DSC 2020

- Speakers are invited, but anyone can attend

RIOT 2019

- First time RIOT was advertised on useR! 2019 website

Room for improvement

- Better promotion of events, with a focus on diversity
- Alternative formats (e.g. breakout session) to enable new contributors
- Sharing information, e.g. recorded talks, blog post

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Package Development
Package development workshops

Forwards package development workshop materials

- Full day and 2 hour versions
- Workshop run in Auckland, Budapest, Chicago, York, Johannesburg
- Upcoming Montevideo
- Working on guide for others to run workshop at RUGs, R-Ladies groups, universities, etc

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Reluctance/Nervousness to Submit to CRAN

- Bad experience on CRAN/official mailing list
  - Decide to not to publish/host on GitHub

- Hoops to jump through
  - A lot of information: CRAN Repository Policy, Checklist for New Submissions
  - Feedback can be unpredictable and underspecified
  - Involved process: updating NEWS, DESCRIPTION, running checks and tests

- R-package-devel provides limited support
  - can still be an intimidating experience
  - focus on specific questions
Basic Onboarding?

- Potential for basic onboarding service for first-time (underrepresented) submitters
  - guidance through checklist
  - help with errors/issues that come up in checks/tests
  - help solve issues identified by CRAN
  - give guidance on resubmission as they "graduate"

- Work with CRAN support team to keep Checklist for New Submissions up-to-date
  - c.f. collaborative list of things to check

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R Core
Python Core Dev: Adding Women to the Team

I want at least two female core Python Devs in the next year

— *PyCon 2015, Guido van Rossum*

From Victor Stinner's PyCon 2019 talk:

2016: 0 women core devs
2017: 2 women core devs
2018: 4 women core devs
~ 30 active core devs
Process of Becoming a Python Core Developer

Mariatta Wijaya described process in her PyCon 2018 talk

- Read the Dev Guide devguide.python.org
- Join core-mentorship and python-dev
- Find issue in bugs.python.org
- Propose pull request

All these steps can be done by non-core members

@mariaa

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Getting to be Invited to Be a Python Core Developer

Promotion to core dev depends on trust

Trust earnt by core devs getting to know people via

- Pull requests (PRs)
- PR review
- Interacting on mailing lists, IRC, Zulip
- Becoming a Developer on issue tracker (able to triage issues)
Mentoring

Victor Stinner in his PyCon 2019 proposes mentoring as a scalable solution to both core dev burnout and lack of diversity

Recent/current work by Python Core devs (Ref1, Ref2)

- Move to GitHub (2017)
- Document promotions process (dev guide)
- Mentoring guide
- Contributor tutorial
- Core dev office hours (public and private)
- Adding enforcement procedure to code of conduct

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More Ideas from Other Communities

Rust: **mentored projects** (diversity scholarships)

- mentees invest 2-5 hours per week over 3 months
- expenses paid scholarship to Rust conference following year

Various: **outreachy projects** for underrepresented groups

- paid internship, 40 hours per week over 3 months
- require mentor(s) to invest 5 hours per week
Outreach from R Core

- Call for help [Reviewing Bug Reports](R Developer Blog, October 2019)
  - At useR! 2020
    - outreach slot adjoining keynote talk
    - parallel session dedicated to R Core speakers
    - tutorial by Tomas Kalibera on contributing to base R
  - Considering "Requests For Proposals" on perceived deficiencies in R
  - community teams propose solutions
Summary

We can all support community-driven efforts for better inclusion of under-represented groups

- Forwards is playing its part here

A lot of ideas from outside and inside R community of how to get more contributors from under-represented groups

- Currently don't have enough active members on Forward on-ramps team
- Needs active participation of R Core and other contributors