



The **HDF** Group



# US-RSE: Empowering Hidden Contributors Driving Science

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# Hidden Contributors – Inspirations for the Title



## Human Computers

- Late 19<sup>th</sup> – early 20<sup>th</sup> century at Harvard
- Since 1935 at NASA

The real “Hidden Figures”: Dorothy Vaughan,  
Katherine Johnson and Mary Jackson/Fotos courtesy from NASA

# Hidden Contributors – Inspirations for the Title

## The hidden REF

Celebrating all research outputs

# Celebrating all research outputs

If we do not recognise the people who are vital to research, we limit our ability to conduct research.

From the UK

**R**esearch  
**E**xcellence  
**F**ramework

<https://hidden-ref.org/>

<https://us-rse.org>



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# Hidden Contributors – Inspirations for the Title

## Hidden roles

These roles can include, but are not limited to

Clinical trials managers

Data stewards and managers

Librarians

Technicians

Lived Experience Contributors

Research Software Engineers

Professional Research Investment and  
Strategy Managers

Professional Services Personnel

Public Engagement Professionals

Researcher Developers

Research Knowledge Engineers

Research Managers and Administrators

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# What is a Research Software Engineer?

We like an inclusive definition of Research Software Engineers to encompass those who regularly use expertise in programming to advance research. This includes researchers who spend a significant amount of time programming, full-time software engineers writing code to solve research problems, and those somewhere in-between. We aspire to apply the skills and practices of software development to research to create more robust, manageable, and sustainable research software.

<https://us-rse.org/about/what-is-an-rse/>

A Research Software Engineer (RSE) combines professional software engineering expertise with an intimate understanding of research.

<https://society-rse.org/about/>



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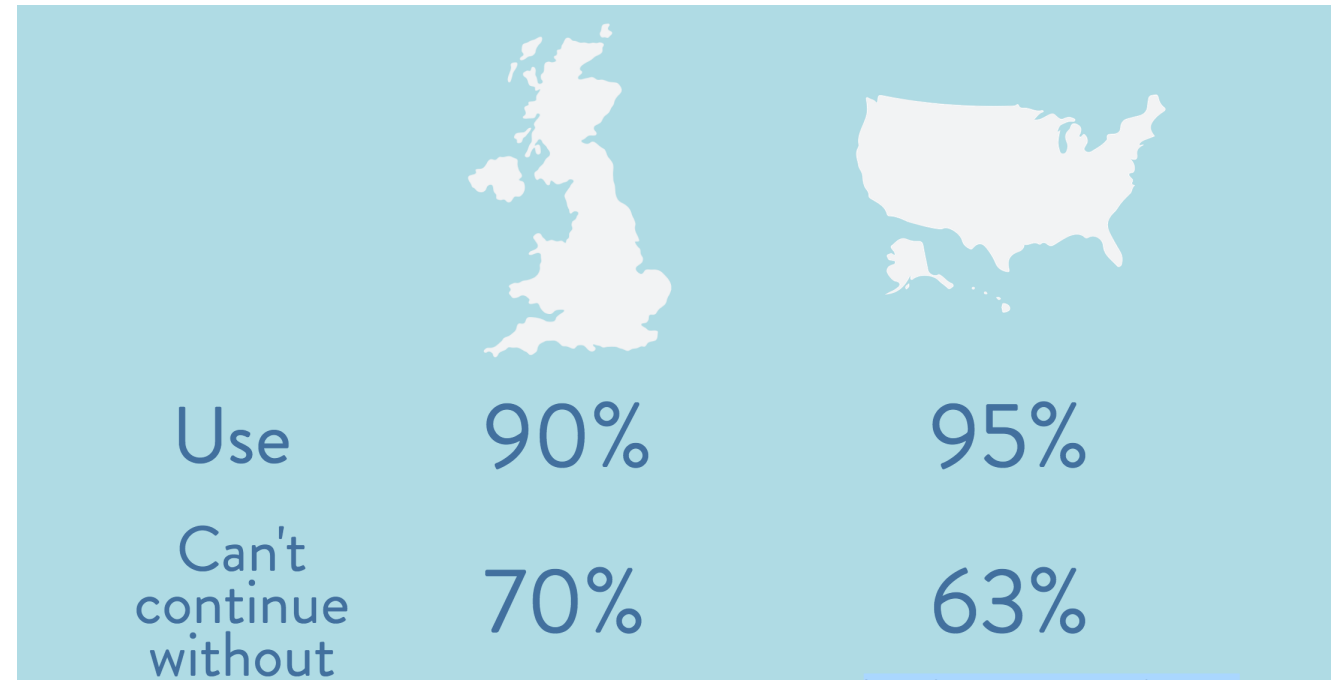
<https://us-rse.org>



# Research Software Engineers

- 50% neither formal nor informal training in software engineering

Lack of career paths in the US  
Lack of incentives to stay in academia and/or national labs

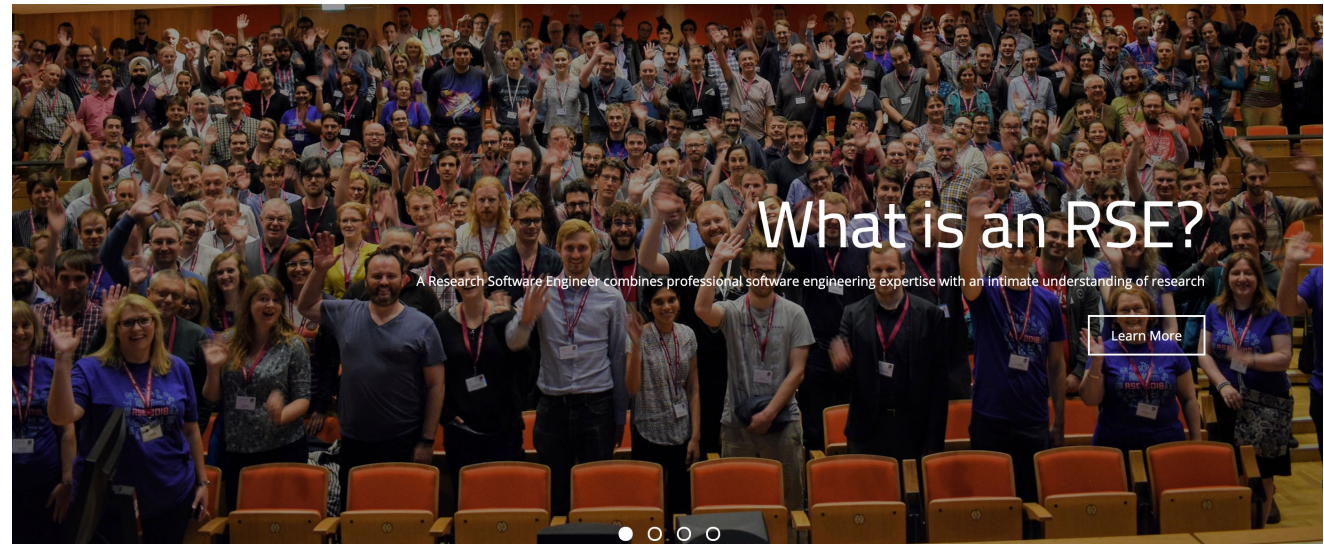


<http://doi.org/10.5281/zenodo.843607>

# US Research Software Engineers Association

Movement and Term: Born in the UK

- 2012 SSI's Collaborations Workshop - "Research Software Engineer"
- Late 2013 UKRSE Association forms
- Since 2019 Society of Research Software Engineering





# Part of an International Movement



Photo by Antonia Cozacu, Jan Philipp Dietrich, de-RSE e.V. (CC BY 4.0).

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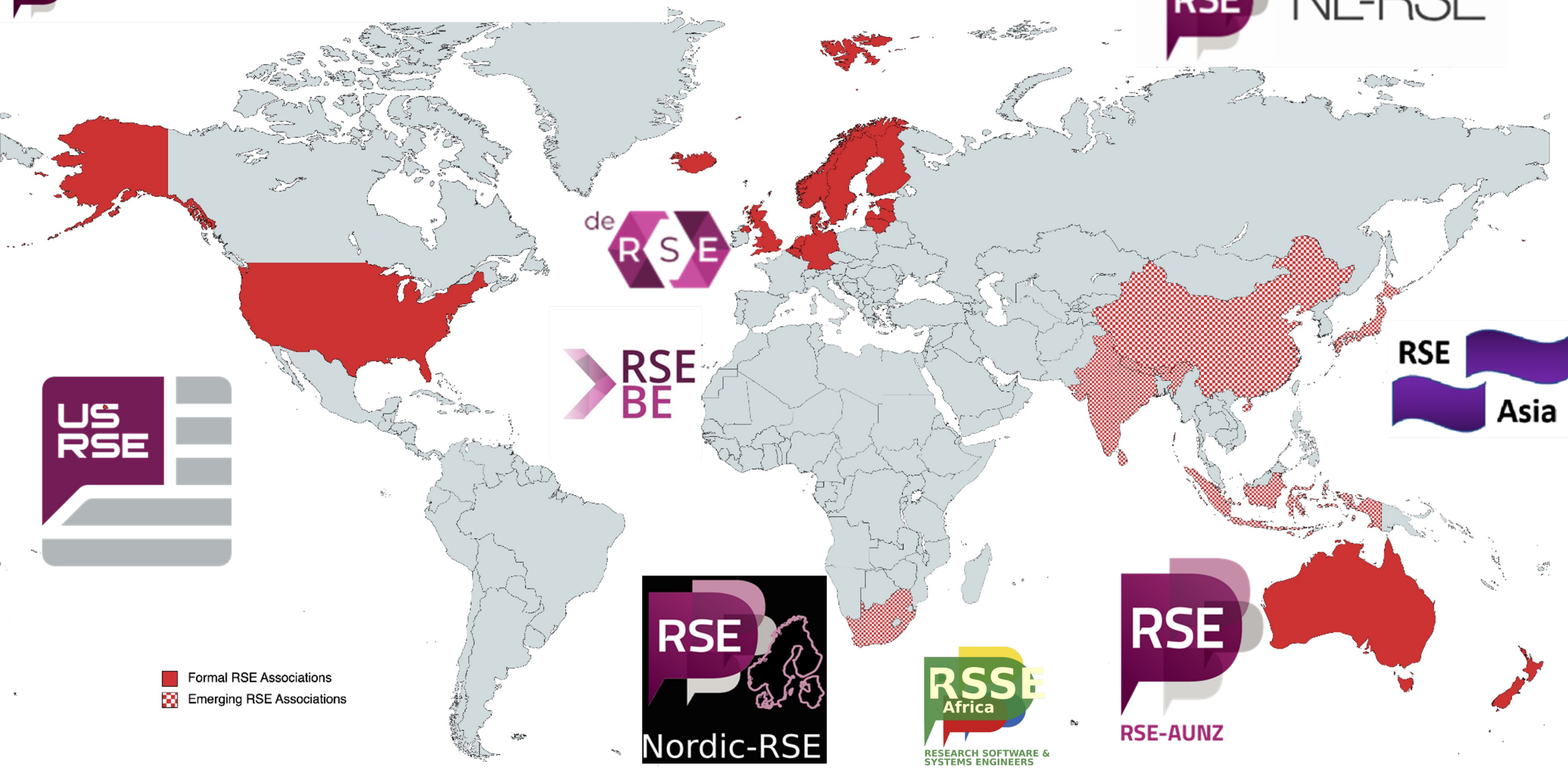
# 2013

UNITED STATES



Formal RSE Associations





# US-RSE – The First Steps

- US: Winter 2017-2018
  - US Survey of RSEs: ~175 responses
    - 12 responded with interest to build a national community
  - UK Sponsored *1<sup>st</sup> International RSE Leaders Meeting*
    - 5 US delegates
- Jan-Feb 2018: US-RSE Slack workspace and first website go live
- Building of steering committee in 2018
- First Steering Committee elections and Annual General Meeting in 2020





# US-RSE Mission

## 1. **Community**

- Create a professional community to share knowledge, connections, and resources

## 2. **Advocacy**

- Promote RSEs impact on research, highlighting the critical and valuable role RSEs serve

## 3. **Resources**

- Provide access to information and material to support individuals and RSE groups

## 4. **Diversity, Equity, and Inclusion**

- Actively promote, encourage, and improve diversity within RSE community



## A community-driven grassroots organization

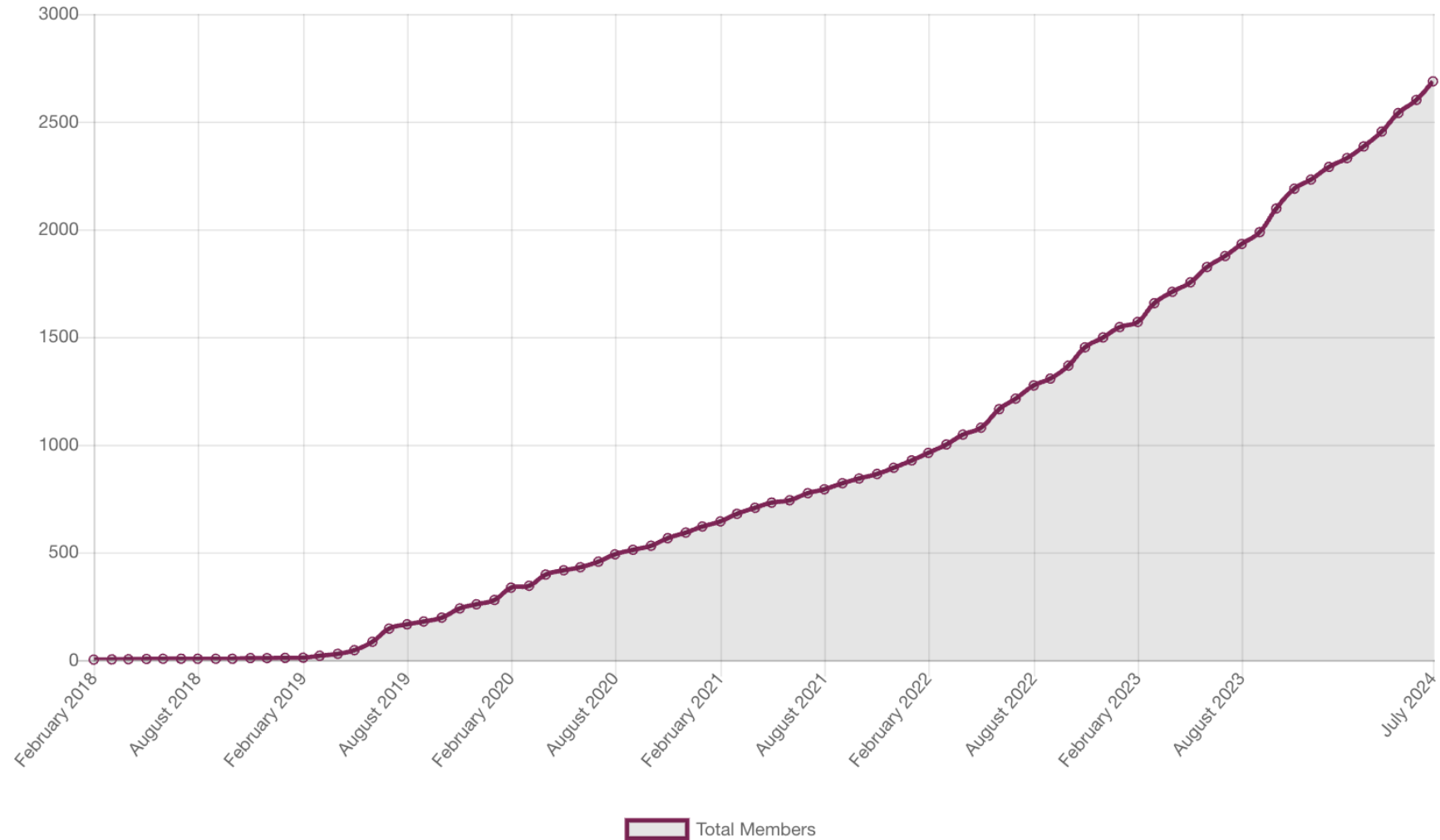
### Members:

- Writing and contributing research software at
  - Universities, laboratories, knowledge institutes, companies, & more
- Interested in research software engineer careers
  - Students, researchers, software engineers
- Identifying as RSE “allies”
  - Manage, sponsor, support



# Membership Growth

Membership in the US Research Software Engineer Association



<https://us-rse.org>

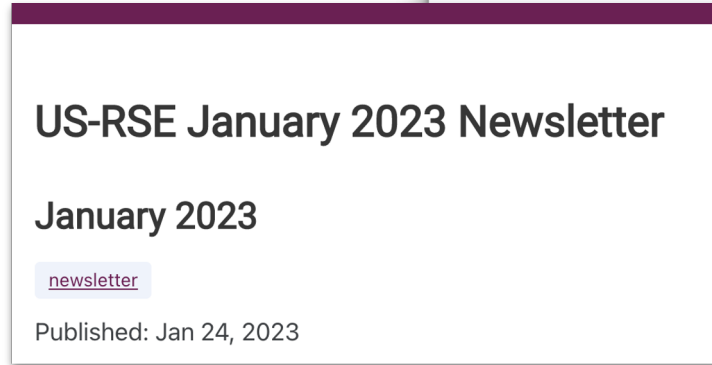
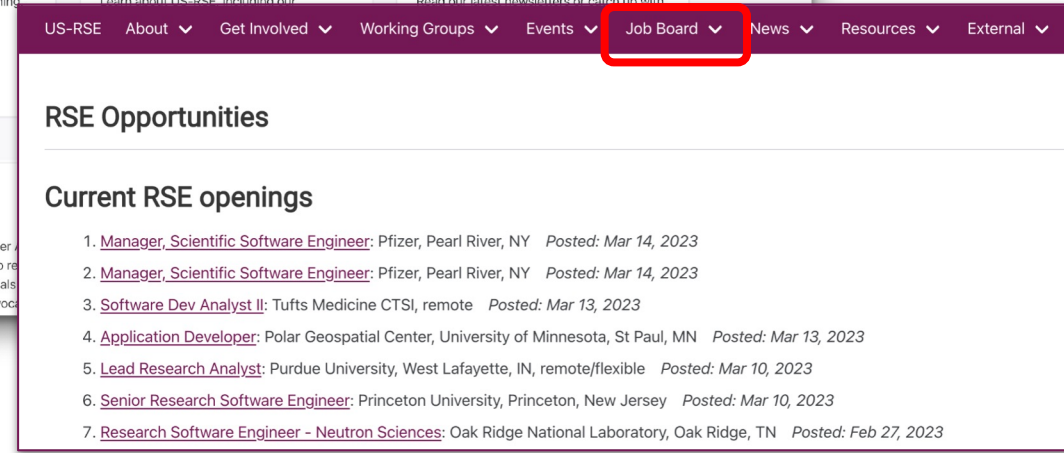
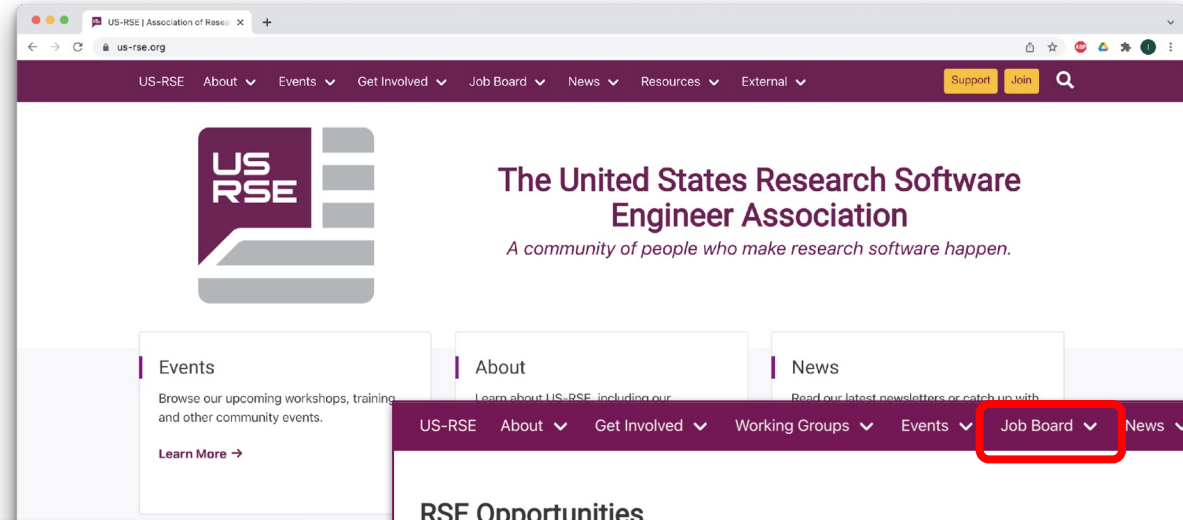


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# US-RSE Resources

- Website
- Newsletters
- Slack Workspace
- LinkedIn, Twitter, Mastodon
- Job Board
- YouTube



<https://us-rse.org>



[@us\\_rse@fosstodon.org](https://www.slack.com/join/shared_invite/zt-19q7k2m9-@us_rse@fosstodon.org)

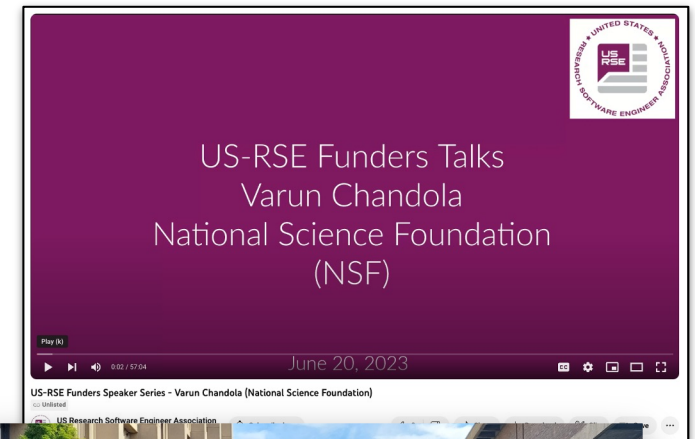
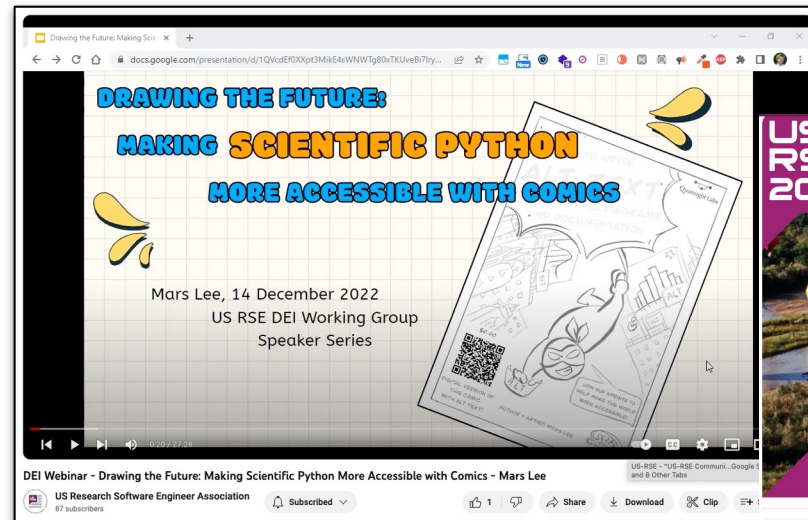




# US-RSE Recurring & Upcoming Events

- Monthly Community Calls
- Annual Conference
- Funder Speaker Series\*
- DEI Speaker Series\* & Media Club
- Education & Training Speaker Series\*
- Conference Panels/BoFs/Workshops/Outreach

<https://us-rse.org/events/>



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Yesterday, Today, Tomorrow  
\*Many available on US-RSE YouTube channel



# Working & Other Groups

## Working groups

- Awards
- Code of Conduct and Moderation
- Code Review
- Diversity, Equity, and Inclusion (DEI)
- Education & Training
- Funds
- Group Management
- Mentorship Program
- Outreach
- RSE Empowerment in National Labs
- User Experience (UX)
- Website
- Regional and affinity groups (being formed)

## Affinity groups

- RSE Group Leaders' Network
- Neuroscience group (under discussion)

## Regional groups

- Chicago
- Front Range (CO)
- New England
- New Orleans



Image by [Gerd Altmann](#) from [Pixabay](#)

# Community Initiative & Travel Funds

- Applications fall into two categories:
  - Community: These benefit a group of individuals within the community (e.g., hosting a regional group meetup)
  - Individual: These benefit an individual applicant (e.g., a travel grant)
- Funding
  - From \$100-\$10,000 per proposal
  - Most expected to be <\$2,500

**Students are here from this funding!**

<https://us-rse.org/funds-and-awards/>

Next deadline: September 30



# Get Involved

- Most activity is happening in Slack...
- Can I post in #<insert\_channel\_name>?
  - Yes!
- Can I create a channel in Slack?
  - Yes!
- Can I start an initiative or organize an activity/event?
  - Yes!
- Can I join a working group?
  - Yes!
- Can I start a working group?
  - Yes!
- Is US-RSE only for HPC, national labs, universities, etc.?
  - No!





# Establishing Unconventional Paths

## Changing Academic Culture



Welcoming and Sustainable Environment



Keep Grass-Root Character

# Thanks!

[https://give.communityin.org/02OaKa?ref=ab\\_5CNhbc](https://give.communityin.org/02OaKa?ref=ab_5CNhbc)



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