



**Rust
Foundation**



2023

Annual Report



CONTENTS

Foreword by Dr. Lars Bergstrom	3
Mission & Leadership	4
Milestones At-a-Glance	5
Project Director Spotlight	6
Member Director Spotlight	7
Membership Overview	8
Rust Highlights from Our Members	9
Finance Report	10
Income, Expenditure, & Net Comparison	11
2023 Expenditure Breakdown	12
Monetary Donations and Cloud Infrastructure Support	13
Program Spotlights	14
Security Initiative	14
Community Grants Program	14
Rust Project Collaboration	16
Events	16
Closing Remarks by Dr. Rebecca Rumbul	15

Foreword

More than a decade ago, I had the good fortune to join Mozilla Research and participate in the close collaboration between Rust and its original driving use case: building a high-performance, secure web browser. It's amazing to see how much Rust has grown as a language, community, and platform since those early days!

By the time the Rust Foundation was formed in 2021, it was becoming clear that this was a language with the power to make systems programming both more accessible and safer. From day one at the Rust Foundation, I have had the distinct pleasure of serving on the Board of Directors on behalf of Platinum Member Google, where I work as Director of Engineering for Android. In 2023, I was elected as the board's Chair.

Through this work, I have had countless conversations with Rust users, maintainers, contributors, enterprise adopters, community leaders, government agencies, and those who are curious about Rust but have yet to begin exploring it. Across all of these conversations, a common theme emerges: like any language, Rust has intricacies and challenges, but its real-world promises of safe, secure, and performant computing make it a critical tool that transcends any hype cycle.

The Rust Foundation, its members, and Rust Project contributors and maintainers are not the only groups that understand the power of Rust. In 2023, the National Institute of Science & Technology cited Rust as an example of a "Safer Language" as part of its Software Assurance Metrics and Tool Evaluation. The U.S. government's Biden-Harris administration declared its intent to collaborate with the open source software community and the private sector to invest in memory-safe languages like Rust. StackOverflow's 2023 Developer Survey revealed Rust to be the "most-admired"

language for the eighth consecutive year. This growing awareness of and respect for Rust is incredibly positive and thrilling to witness, but with it comes a unique set of challenges. How can Rust further scale to serve new interest groups and onboard many new developers and adopters while still maintaining the core values that have served it well for more than ten years?

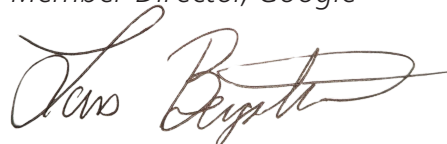
Over the past year, the Rust Foundation has risen to meet the surging demand for Rust support, scalability, and research. In facing these practical needs head-on, the Rust Foundation has further established itself as an independent nonprofit that is prepared to support Rust and its global community for years to come.

In the Rust Foundation's 2023 Annual Report, you will find expected data on our finances, staff team growth, and focus areas like the Security Initiative and the Community Grants Program over the past year. What's more, you will find a compelling story about the Rust Foundation's growing maturity; the strength that comes from uniting corporate and Project members to build a unified strategy; and the widespread benefits of Rust that can be harnessed by swift, collaborative action on new opportunities and challenges as they arise.



Dr. Lars Bergstrom

*Rust Foundation Board Chair,
Member Director, Google*





Mission & Leadership

Our Mission is for global computer systems to be more secure, efficient, and performant through the use of the Rust programming language. We are dedicated to accomplishing this objective by stewarding the Rust language, supporting Rust communities worldwide, and investing in present and future Rust talent.

2023 Board of Directors

Dr. Lars Bergstrom

Board Chair, Member Director, Google

Nell Shamrell-Harrington

Vice-Chair, Member Director, Microsoft

Andy Wafaa

Silver Member Representative, Treasurer

Mark Rousskov

Rust Project Director & Secretary

Stephen Chin

Member Director, JFrog (January-July 2023)

Jakob Degen

Rust Project Director (September 2023-present)

Eric Garcia

Member Director, Meta

Peixin Hou

Member Director, Huawei

Ryan Levick

Rust Project Director

Jane Losare-Lusby

Rust Project Director (January-September 2023)

Tyler Mandry

Rust Project Director (January-September 2023)

Seth Markle

Member Director, AWS

Scott McMurray

Rust Project Director (September 2023-present)

Santiago Pastorino

Rust Project Director (September 2023-present)

Josh Stone

Rust Project Director (January-September 2023)

Foundation Staff Team

Dr. Rebecca Rumbul

Executive Director & CEO

Abi Broom

Operations Manager

Gracie Gregory

Director of Communications & Marketing

Paul Lenz

Director of Finance & Funding

Joel Marcey

Director of Technology

Tobias Bieniek

Software Engineer, crates.io (April 2023-present)

Jan David Nose

Infrastructure Engineer

Sage Griffin

Communities Advocate (January-October 2023)

Adam Harvey

Software Engineer, Security (March 2023-present)

Walter Pearce

Security Engineer

Milestones At-a-Glance

In 2023, the Rust Foundation team...



Welcomed

12 new members



Received

\$1.9M worth of in-kind infrastructure support.



Raised

\$4.56m in membership dues and donations (financial & in-kind) from organizations interested in the development of Rust.



Sponsored & Supported

11 Rust community events.



Launched

A new Rust enterprise-focused event: Rust Global.



Hired

3 new full-time engineers.



Attended

20 events around the globe



Awarded

\$400,000 in financial grants to increase the usage of Rust & support Rust maintainers, contributors, & community organizers.

And much more!

For a breakdown of the Rust Foundation's quarterly activities in 2023, please [read our "Quarterly Updates" blog series.](#)

2023 Project Director Spotlight

Rust Foundation Project Directors serve as our board's technical advisors and representatives of the Project and liaise between the Rust Foundation staff team and the Rust Project's Leadership Council (created in June 2023). In 2023, our Project Directors invested a significant amount of time fulfilling their duties as board members, advising the Rust Foundation staff team, and facilitating important discussions within the Rust Project and community. Without our Project Directors, the Rust Foundation would not be able to adequately support the Rust programming language and the communities of maintainers developing it.

In August, the Rust Project held an election for new Project Directors as three of our Project Directors' two-year terms were up. In September, we were pleased to welcome Santiago Pastorino, Scott McMurray, and Jakob Degen as our newly appointed Project Directors. Please join us in thanking our outgoing Project Directors Jane Losare-Lusby, Tyler Mandry, and Josh Stone for their service as Project Directors over the past three years.



Jakob Degen

Project Director
(September 2023-present)



Mark Rousskov

Project Director &
Board Secretary



Ryan Levick

Project Director



Jane Losare-Lusby

Project Director
(January-September 2023)



Scott McMurray

Project Director
(September 2023-present)



Tyler Mandry

Project Director
(January-September 2023)



Santiago Pastorino

Project Director
(September 2023-present)



Josh Stone

Project Director
(January-September 2023)

The Rust Foundation is grateful to the Rust Project and community for their dedication to building, maintaining, and improving the Rust programming language over the past year. In June, our team was excited to see the formation of the Rust Project Leadership Council which now plays a critical role in serving the Project and community.

Please visit the official Rust Programming Language Blog at blog.rust-lang.org for more details on Rust Project milestones in 2023.

Member Director Spotlight

Rust Foundation Member Directors represent the Rust Foundation Member organizations on our board. Member Directors collaborate with our Project Directors to support the professionalization of the Rust language, vote on key motions that affect the work carried out by the Foundation, and advise the staff team. Their leadership in 2023 enabled the Rust Foundation to shape, fund, and carry out the critical work described in this report. Please join us in thanking the 2023 Rust Foundation Member Directors for their time, counsel, and support over the past year.



Dr. Lars Bergstrom

Board Chair, Member Director,
Google



Eric Garcia

Member Director, Meta



Peixin Hou

Member Director,
Huawei



Seth Markle

Member Director, AWS



**Nell Shamrell-
Harrington**

Member Director,
Microsoft, Board
Vice Chair



Andy Wafaa

Silver Member
Representative



Stephen Chin

Member Director, JFrog
(January-August)

2023 Member Overview

Our Members

In 2023, the Rust Foundation was grateful for the support and membership from the following organizations...

Platinum Members



Gold Members

Shopify

Silver Members

1Password	Open Source Security, Inc
AdaCore	OxidOS Automotive
Appflowy	Lynx
Arm	Red Badger
Automata Labs	SafeStake
Dropbox	Sentry
Embecosm	Slint
Ferrous Systems	SpruceID
Filecoin Foundation	Tabnine (Jan-Mar 2023)
Futurewei Technology	Tag1
Grafbase	Techfund
Helsing	Threema
HighTec	Toyota Connected North America (Jan-Oct 2023)
JetBrains	Traverse Research
KDAB	TSY Capital Limited
Keyrock	Turbofish
Knoldus	Tweede golf
Mainmatter	Watchful
Matter Labs (Jan-Sept 2023)	XFusion
Mozilla	Zama

Thank you to our members for generously supporting the Rust Foundation's mission. If your organization is interested in becoming a Rust Foundation Member, please contact us at membership@rustfoundation.org



Rust Highlights from Our Members

Our members join the Rust Foundation because they are committed to the maintenance, development, and future success of the Rust programming language. Our membership structure is broken into Platinum, Gold, Silver, and Associate tiers (listed in order of investment). Our members have the opportunity to help shape and support important initiatives benefiting the Rust programming language and community, collaborate with Rust Project leaders during board meetings, and contribute their expertise to our many areas of focus. Many Rust Foundation Members use Rust in production on their engineering teams and serve as excellent case studies for the utility and value of Rust.

Here's a look at how several Rust Foundation Members are using Rust today...



In the past year, Huawei has used the Rust language in various fields, ranging from telecommunication equipment to mobile software, to achieve the harmonious coexistence of memory safety and high performance. In 2023, we have also actively contributed and invested in upstream communities and technology sources to fulfill our vision of promoting the sustainable development of Rust and benefiting more regions and industries around the world."

**- Peixin Hou,
Member Director,
Huawei**



RED BADGER



Red Badger helps large, complex organisations with swathes of legacy technologies choose and deploy the best possible approaches for their goals. For instance Crux, our headless app dev framework based on a Rust core, offers a faster, safer and more scalable way to develop large cross-platform customer apps."

**- Stuart Harris,
Co-Founder & Chief
Scientist, Red Badger**

KDAB



At KDAB, we are seeing increased curiosity about Rust among our engineers and our customers. Our CXX-Qt crate allows smooth interoperability between user interfaces written in Qt/C++ and backend functionality that leverages Rust. Such hybrid systems are likely to come up in our customer projects more and more, as Rust continues to gain acceptance and relevance in the industries we are active in. The Rust ecosystem provides a lot of great technology that can help us and our customers do what we need to do better."

**- Till Adam,
Chief Commercial Officer,
KDAB**

Find more stories about how Rust Foundation Member organizations are using Rust in production on our [blog](#).



2023 Finance Report

Summary & Context

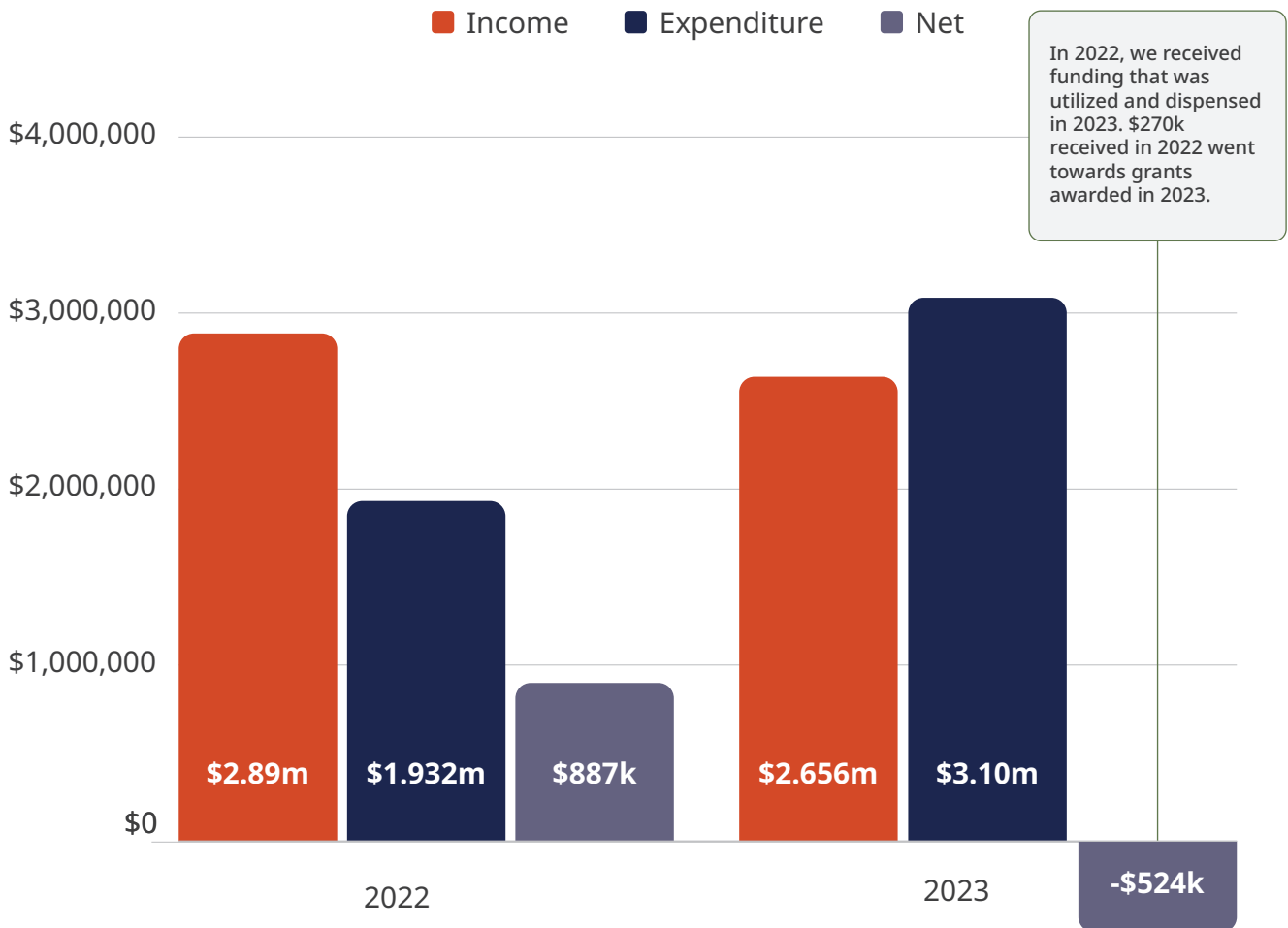
The Rust Foundation was primarily funded by a growing base of global member organizations over the past year – 43 by December 2023. Their support allowed us to design a strong program of work benefitting the Rust Project, community, and ecosystem.

We also started Q1 with generous funding for our Security Initiative from OpenSSF's Alpha-Omega Project and Platinum Member, AWS. These grants enabled us to hire three new engineers between January and March and scale up our technical work significantly throughout the rest of the year. The Rust Foundation also continued to provide financial awards to Rust maintainers, contributors, and community organizers through our Community Grants Program in 2023.

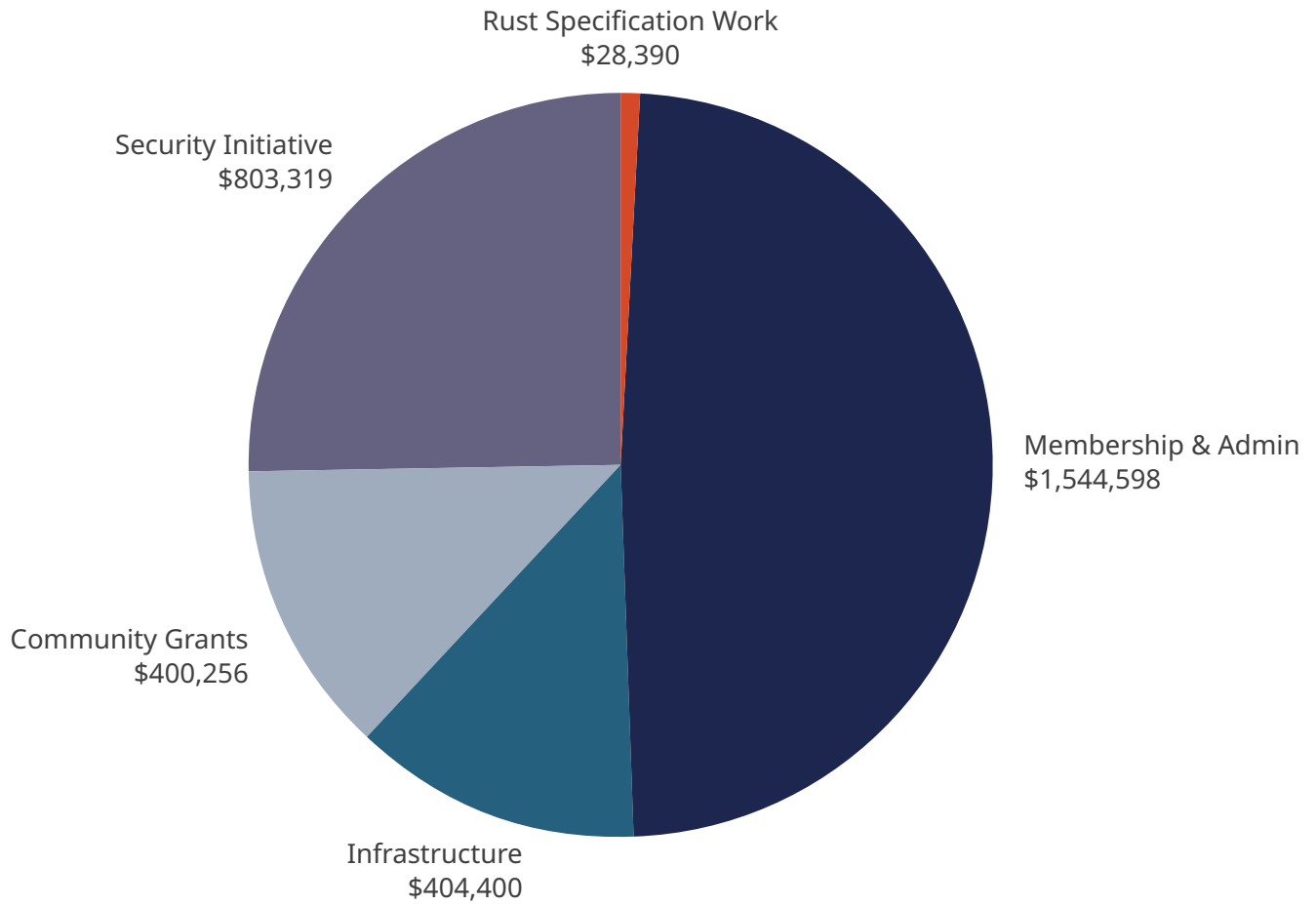
Thank you to all Rust Foundation Members and independent donors over the past year. Without your contributions, the critical work outlined in this report would not have been possible.

Note: All Financial Report figures have been rounded up to the nearest thousand and are in USD.

Income, Expenditure, & Net Comparison



2023 Expenditure Breakdown





Monetary Donations & In-Kind Support

In addition to the dues we receive from the Rust Foundation's members, we also received generous monetary donations and in-kind support in 2023. These independent donations help us fund a number of critical Rust language services and programs such as our cloud infrastructure expenses, Community Grants Program, and Security Initiative.

Note: The figures below do not represent membership fees.

In 2023, we received...

Monetary donations & grants from the following organizations:



Cloud infrastructure support from the following organizations:



To all the organizations and individual donors that supported the Rust Foundation in 2023: thank you.

If you or your organization would like to learn more about making an impact in Rust through monetary or in-kind donations to the Rust Foundation, please email us at contact@rustfoundation.org



Program Spotlight

The Rust Foundation's first two years were spent creating and launching programs to benefit the Rust language, Project, and community. This foundational work allowed us to enter 2023 with the necessary resources and success stories to take our programs to the next level. Along the way, we identified many new opportunities for the Rust Foundation to provide value as well.

Here is a look inside the Rust Foundation initiatives, focus areas, and projects that provided particular value to the global Rust ecosystem in 2023...

Security Initiative	Community Grants Program
<p>In 2023, the Rust Foundation had approximately \$960k in combined funding from OpenSSF's Alpha-Omega project and Platinum Member, AWS to support our Security Initiative. This Rust Foundation program was announced in 2022 with a mission of advancing the state of security across the Rust ecosystem.</p> <p>2023 Security Initiative Highlights:</p> <ul style="list-style-type: none">• The completion and release of Rust Infrastructure and Crates Ecosystem threat models• Creation of our first technical open source projects, Painter - an open source tool that creates a complete call graph across the entire crates ecosystem - and Typomania - a tool to check for typosquatting in package registries.• Crates.io security improvements and technical debt reduction.• New tools and best practices to identify and address malicious crates• Reduced technical debt within the Rust Project• Increased collaboration between our Technical Team and the hardworking members of the Rust Project security, infrastructure, and crates.io-focused teams and working groups.	<p>2023 was our second full year of the Community Grants Program – an initiative to provide financial and practical support for existing talent in the Rust ecosystem and create new opportunities for those passionate about Rust.</p> <p>To date, the Rust Foundation's Community Grants Program has awarded 45 Project Grants and funded 32 Fellowships. In 2023, our team funded 25 Project Grants, 8 Event Support Grants, and 2 Hardship Grants, made 12 Fellowship awards, and paid out a total of \$400k in funding.</p> <p>Over time, we have seen a clear demand from the Rust community for Rust Foundation grants and financial awards. In 2023, we saw an increase in applications for Project Grants and Fellowships and frequently heard feedback that more grant opportunities were desired.</p> <p>Key 2023 Observations:</p> <ul style="list-style-type: none">• Fellowships delivered the most impact for the Rust Project out of all grant categories.• Our funding for grants in 2023 could not meet community demand – many applicants could not be selected due to high application rates.• Our "Mentored Fellowship" roles introduced in 2023 are showing promise, as they directly support Rust Project teams in need.

Security Initiative

Our Technology Team oversaw many other impressive contributions to Rust security through the Security Initiative.

The Rust Foundation is pleased to report that both Alpha-Omega and AWS have generously granted us another round of funding to continue the program in 2024.



You can find more details in our first [Security Initiative Report](#).

Community Grants Program

- We faced difficulties in demonstrating the value of our program to prospective sponsors. This was primarily because Project Grantees have historically selected their own areas of focus, making it challenging to align all Project Grants with Rust Project priorities.

Despite these challenges, the Community Grants Program aligns with our mission and a continued Rust community demand remains.

For these reasons, we will continue the program in 2024 with some important changes...

- Expanded “Mentored Fellowship” positions to increase the pipeline of contributors – in consultation with Rust Project leadership.
- The Rust Project Leadership Council will drive the process of identifying high-priority pieces of work for Project Grants with the community.
- We will open a rolling Project Grant application process for prospective grantees to apply to carry out these agreed-upon priorities.
- We will work with the Leadership Council to identify applicants to receive the Project Grant associated with each priority.

Rust Project Collaboration

The Rust Foundation exists to provide the Rust language and community with necessary funding, support, administration, and resources. In carrying out this work, we regularly communicate and collaborate with the Rust Project's hardworking maintainers and contributors. Since we are a relatively young organization and the Rust Project is a living open source project, we expect the processes between both groups to change over time.

In 2023, there were several exciting and notable changes in how our team works with the Rust Project:

- Our Director of Technology Joel Marcey was selected to serve as Editor of the forthcoming Rust language specification – an authoritative reference on the appropriate use, function, and behavior of Rust. In this position, Joel will apply his deep experience with industry standards and technical writing to guide the specification.
- Infrastructure Engineer Jan David Nose ("JD") was named the Co-Lead of the Rust Project's Infrastructure Team (alongside Jake Goulding) – a position he will perform over the next several years. JD was selected for this position due to his time, expertise, and dedication to reinforcing Rust's Infrastructure.
- Software Engineer Adam Harvey joined Software Engineer Tobias Bieniek on the Rust Project crates.io Team.
- Security Engineer Walter Pearce has been helping successfully lead our Security Initiative since his arrival in Q1. This program requires ongoing collaboration with members of the Rust Project Infrastructure Team, crates.io Team, Rust Project Security Response Working Group, & Rust Project Secure Code Working Group.

We would also like to congratulate the Rust Project for creating its Leadership Council earlier this year. Our team believes the council represents an exciting new chapter and further momentum for Rust.

Events

The Rust Foundation was proud to sponsor the following Rust events in 2023:

Rust Nation UK – London, England (February)

RustConf – Albuquerque, New Mexico, USA (September)

EuroRust – Brussels, Belgium (October)

We also provided support to eight Rust community organizers through our Event Support Grants program.

About Rust Global

In September 2023, the Rust Foundation officially hosted its first event: Rust Global.

We created Rust Global to unite Rust enthusiasts and enterprise adopters with open source business leaders and global decision-makers. Our first Rust Global event was co-located with WasmCon near Seattle, Washington, USA. With a packed room and many fantastic conversations with people passionate about the growth of Rust, we're considering it a great success.

Stay tuned for more news about Rust Global in 2024. In the near future, we will also be sharing details about our support of RustConf going forward!



Closing Remarks

At the end of last year's annual report, we shared the Rust Foundation's intention to consolidate our work in key existing areas, iterate on programs that have gone well, and support new streams of work benefitting the Rust language and landscape in 2023. In revisiting our activities over the past 12 months, I am confident that our team has realized these goals and reached additional milestones we had not anticipated.

I believe that 2023 will be remembered as an important year for memory-safety, with some of the largest governments in the world endorsing languages like Rust for safe and secure computing. The Rust Foundation has taken the global demand for well-resourced, secure coding tools seriously over the past year. The results of our focus in this area can be seen in security-focused work streams like our Security Initiative and Rust infrastructure support.

In 2023, the Rust Foundation was proud to have further invested in Rust maintainers and contributors through our Community Grants Program, supported many community events, collaborated with and served our base of members, delivered value to Rust users, and worked with the Rust Project to adapt to the evolving needs of our community.

The Rust Foundation has many exciting projects and challenges to face in 2024 — facilitating the creation of Rust's forthcoming language specification, developing a Rust Foundation training and certification program, and further improving security in the Rust ecosystem to name a few. We have our work cut out for us in the months ahead. Still, I know we will continue making meaningful contributions to the Rust language ecosystem with the support of our generous partners and the strategic goals we have built together.

To the Rust Foundation's members and many collaborators in 2023: thank you for supporting our mission of stewarding the Rust programming language and contributing meaningfully to the global Rust community. Rust is better when we work together.



Dr. Rebecca Rumbul

*Executive Director & CEO
The Rust Foundation*





rustfoundation.org