# SRE CON\_AMERICAS





Pay 1/4/201

SAN FRANCISCO, CA, USA · March 18-20, 2024

### Sponsored by USENIX, the Advanced Computing Systems Association

### **Important Dates**

- Talk and panel proposals due:
  Tuesday, October 31, 2023, 11:59 PDT
- Notification to talk and panel presenters:
  Tuesday, November 28, 2023
- Confirmation of acceptances and deadline for program materials: Tuesday, December 19, 2023
- Proposals for lightning talks due: Tuesday, February 6, 2024, 8:00 pm PST
- Notification to lightning talk presenters: Tuesday, February 13, 2024
  - Slides due for selected lightning talks: Sunday, March 3, 2024

### **Overview**

Join us in San Francisco, CA, USA, as we gather to discuss a variety of Site Reliability Engineering (SRE) topics. This year, our theme will focus on tradeoffs.

Tradeoffs can occur in many areas. There are engineering and architectural tradeoffs that occur when designing reliable, performant, cost-effective systems. There are tradeoffs related to when deciding what to automate and how. Tradeoffs are made during legacy modernization, when companies need to scale for growth, and when deciding how to best meet business needs under increasing performance, reliability, and cost pressure. Incidents may involve tradeoffs when difficult decisions must be made, sometimes with incomplete information. There are tradeoffs each of us make in our careers as we decide which career path to pursue. In this Call for Participation, we encourage submissions about tradeoffs of all kinds. Additionally, we welcome submissions of talks on a variety of topics, including, but not limited to, the concepts listed in the Suggested Topics section below.

SRE as a practice (whether you call it SRE or something else) exists not only in technology-focused companies but also in organizations of all sizes and backgrounds. Your insights will help create a meaningful, diverse, and inclusive program for SREcon24 Americas. Conversations are never complete when they focus just on successes; we also encourage talks that focus on lessons learned from failures, challenging incidents, and hard problems.

We look forward to learning from both new and experienced speakers across SRE and the broader systems engineering and distributed software operations space.

This year we'd like to have even more speakers from different fields of work and those who haven't presented before. Many of our best talks have come from people with new perspectives to share. At each SREcon globally, we welcome and encourage attendance from all individuals from any country with an emphasis on in-region presenters. We also seek to include people who are often underrepresented in or excluded from technology, including (but certainly not limited to): people of all colors, women, the LGBTQIA+ community, people with disabilities, neurodivergent participants, students, and veterans. Similarly, we welcome participants from diverse professional roles such as QA testers, customer experience/ support, security teams, DBAs, network administrators, compliance experts, UX designers, health care professionals, scientists, and economists. Regardless of who you are or the job title you hold, if you are a technologist who faces unique challenges and shares our areas of interest, we encourage you to be a part of SREcon24 Americas.

### **Proposals**

- Talks
  - 15-minute talks with an additional 5 minutes for Q&A
  - 35-minute talks with an additional 10 minutes for O&A
- Panels
  - Discuss a specific topic and engage in a conversation with a small group in front of the attendees.
  - Duration is negotiable.
- 4-minute lightning talks with auto-advancing slides:
  - We are accepting proposals for 4-minute Lightning Talks on any topic related to the practice of Site Reliability Engineering. Each selected talk should have exactly 16 slides, auto-advancing to the next slide every 15 seconds. The time limit is strict, so make sure that you have only one core idea for your talk. Talk submissions are due on February 13, 2024. Slides for selected Lightning Talks are due on March 8, 2024, so that they can be run centrally. Please submit your proposals via the web submission system linked from the Call for Participation web page.

# **Suggested Topics**

These topics are designed to help generate ideas for submissions. They are by no means inclusive of all ideas and we welcome submissions outside of these suggestions as well.

### **Systems Engineering/Principles**

Talks on these subjects should focus on providing a deeper understanding of how key technologies used in large-scale distributed systems work: their architecture, their strengths and their sharp edges, and new developments. These are the details you need when designing, supporting, and scaling your infrastructure. Talks that deal with applied theory (e.g., queueing theory, load balancing theory, consistency models) are particularly welcome.

We seek proposals on a number of topics, such as:

- Performance (e.g., OS features, hardware design, bottlenecks)
- Databases (e.g., how is data stored on disk in MySQL, PostgreSQL performance, consistency models)
- Observability (e.g., monitoring overview, events vs. metrics, visualizations, debugging, scaling your monitoring infrastructure)
- Distributed Systems (e.g., consistency and consensus, Hadoop, MapReduce, Jupyter Notebooks, Containers)
- Network (e.g., SD WAN, load balancing, DNS, IP protocols, layer 2 networks, BGP)
- Firmware (e.g., Open Source Firmware, UEFI)
- **Security** (e.g., TPMs, Hardware Security Modules, transport encryption, filesystem encryption, data management)

#### **Engineering and Architectural Tradeoffs**

- Dealing with unplanned capacity constraints, scale, and latency and the tradeoffs made along the way
- Legacy modernization and architectural tradeoffs when deciding how to modify or migrate to new systems
- Handling the "pressures of business" and navigating difficult decisions and tradeoffs made between system performance and system availability, or system performance/reliability and cost
- Build vs buy decisions and tradeoffs when selecting or building tooling
- Navigating times of high growth or hyper-scale and tradeoffs related to system pressures of scaling or expanding systems
- Deciding what and how to automate, and tradeoffs around technologies and approaches to automation
- Balancing a heavy workload of "keeping the lights on" work while also investing in strategic initiatives such chaos engineering

# **Tradeoffs During the Unexpected or Times of Challenge**

- Meeting technical requirements despite constrained supply, long lead times, and growing costs
- Tradeoffs when doing more with less, such as maintaining team and infrastructure health under economic pressure and limited resources
- Difficult decisions and tradeoffs made during incidents, including choosing between possible remediation paths and how SRE organizations consider tradeoffs when making hard choices in the heat of the moment
- Responses to production environment instability or unexpected performance constraints including deciding which post-incident action items to prioritize and pursue

### **Career and Lifestyle Tradeoffs**

- Deciding between the individual contributor and manager path
- Tradeoffs between remote work, hybrid, and in-person teams
- Work-life balance and considerations around factors such as location, industry, and job responsibilities
- Tradeoffs between different models or approaches to SRE

## **Speaker Information**

To see the details of what we want to know about your proposal to speak, we encourage you to visit the talks submission system linked from the Call for Participation web page.

Please note that we make use of a two-phase submission process: Phase 1 provides details needed for the program committee to pick the best content. Phase 2 is where you provide your personal information and the short description for the program agenda. Only accepted and waitlisted proposals will proceed through Phase 2; that information *must* be provided by December 19.

Both presenters and organizers may withdraw or decline proposals for any reason, even after initial acceptance. Speakers must submit their own proposals; third-party submissions, even if authorized, will be rejected.

If you have questions about this Call for Participation, feel free to drop us a message at srecon24americas\_chairs@usenix.org. If you are a new presenter or would just like some extra help, please reach out. We are happy to provide support.

SREcon24 Americas is scheduled to be held in San Francisco, CA, USA, on March 18–20, 2024.

# **Background**

SREcon is a gathering of engineers who care deeply about site reliability, systems engineering, and working with complex distributed systems at scale. Our purpose is to be inclusive as we bring together ideas representative of our diverse community, whether its members are focusing on a global scale, launching new products and ideas for a small business, or pivoting their approach to unite software and systems engineering. SREcon

challenges both those new to the profession as well as those who have been involved in SRE or related endeavors for years. The conference culture is built upon respectful collaboration amongst all participants in the community through critical thought, deep technical insights, continuous improvement, and innovation.

For more information on the themes and programs of past conferences, see the list of past conferences available at https://www.usenix.org/srecon#past.

# **Conference Organizers**

## **Program Co-Chairs**

Sarah Butt, SentinelOne Dan Fainstein, The D. E. Shaw Group

### **Program Committee**

Ishwari Aghav, Meta David Amin, Duolingo Derek Arnold, Stark State Martin Barry, Fastly Daria Barteneva, Microsoft Blake Bisset, Stanza Systems Fatema Boxwala, Google KC Braunschweig, Meta Brent Bryan, Google Patrick Cable, F5 Inc. Adam DeConinck, NVIDIA Stephane Dudzinski, Reddit

Alex Elman, Indeed Elise Gale, Microsoft

Carla Geisser, Layer Aleph Lorin Hochstein, Coupang Jonah Horowitz, Apple Kyle Lexmond, Meta

Cory Lueninghoener, Sandia National Laboratories Jamie Magin

Laura Maguire, Trace Cognitive Engineering Anil Kumar Ravindra Mallapur, LinkedIn Mark McBride, Slack Holly Micham-Mooneyham, Cisco Meraki Courtney Nash, The VOID Lex Neva, SRE Weekly and Honeycomb J. Paul Reed, Spective Coherence, Inc. Emily Ruppe, Jeli.io Amy Tobey, Equinix

# **Steering Committee**

Kurt Andersen, Clari Daria Barteneva, Microsoft Liz Fong-Jones, Honeycomb Casey Henderson, USENIX Association Xiao Li, JPMorgan Chase John Looney, Reddit Laura Nolan, Stanza Mike Rembetsy, Bloomberg **Emil Stolarsky** Avleen Vig, Twilio