# SRE CON_ AMERICAS

**SANTA CLARA, CA, USA** • March 25–27, 2025

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*Sponsored by USENIX, the Advanced Computing Systems Association*

## Important Dates

- Talk proposals due:
  **Monday, November 4, 2024, 11:59 pm PDT**
- Notification to talk presenters:
  **Monday, December 2, 2024**
- Confirmation of acceptances and deadline
  for program materials:
  **Monday, December 23, 2024**

## Overview

Join us in Santa Clara, CA, as we gather to discuss a variety of Site Reliability Engineering (SRE) topics. This year we look to explore Site Reliability Engineering in the age of disruption.

SRE operations exist in a world characterized by change and disruption. In recent years this has been in the form of both expected and unexpected fluctuations.

The introduction of new technologies always influences SRE work. The shift from bare metal to cloud infrastructure brought about a new world of tooling, principles, and practices to operations as organizations adapted. Other changes like microservice architectures, DevSecOps, and generative AI have all deeply influenced how we build and maintain large-scale software systems. Technologies like ChatGPT and Copilot have changed everyday work as engineers take advantage of the capabilities for analyzing and generating code and documentation and assisting with decision-making. New technologies also bring about changes in skill requirements for engineers, onboarding processes, and teams are resourced and managed.

While SRE is always changing to accommodate the increasing capabilities of automation, it is also adjusting to the disruptions that layoffs and hiring freezes present. Tradeoff decisions and efforts to optimize can disturb well established practices as organizations adjust to changing market and macro environmental conditions. Outside of everyday operations, software outages impact not only the engineers who build and maintain the software systems but the societies in which they operate. Nowadays, when software goes down, planes are grounded, doctors are unable to read charts, calls are dropped, and mortgages don't get paid. Adaptability and real-time learning is essential to navigate the disruptions of a dynamic world.

In this way, we seek contributions that describe, examine, analyze, provide guidance, or make predictions around disruption in SRE operations such as:

### Disruption

- AI-infused everything
  - The realities of operating or working with AI
  - Surprising or unexpected changes as a result of new technologies
- New requirements for highly regulated systems or critical societal digital infrastructure
- Handling of automation induced incidents

### Joint Cognitive Systems

- The transformation of work when moving from human-human coworkers to human-automated coworkers (AI and automation as co-worker); functional allocation
- Design of work systems that increasingly include higher levels of autonomous action by automation

### Everyday SRE

- The nuts and bolts of operations
  - Skills and levels of expertise required for handling normal operations and incidents
  - What are the standard or common practices of SRE that can be generalized beyond the SRE book?
- The realities of operations
  - Running "lean" operations and doing "more with less"
  - Is austerity the new normal?
  - New ways of thinking about "keeping-the-lights-on" work
- The practicalities of doing SRE
  - Scaling
  - The consistent tradeoffs of maintenance vs feature development
  - Optimization and building tools to efficiently run the environment
- Incident management
  - Case examples of responding to surprising or unexpected events
  - Strategies for coping with disturbances
  - The changing future of incident management to deal with widespread outages in non-software organizations

## Systems Engineering/Principles

Separate to our theme of disruption, we will again host a track dedicated to explaining the technical underpinnings of the systems and infrastructure with which we work. 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)

Additionally, we always welcome submissions on all topics relevant to both the human side and the technical aspects of software operations, availability, and reliability.

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 SREcon25 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 previously. 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 historically 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 SREcon25 Americas.

## Proposals

- 15-minute talks with an additional 5 minutes for Q&A
- 35-minute talks with an additional 10 minutes for Q&A

### Lightning Talks

We will once again have a program with lightning talks. The call for participation will be available on the Call for Participation web page in January.

## 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, 2024.

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 srecon25americas_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.

## 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 at https://www.usenix.org/srecon#past.

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