
Open Source Summit & Embedded Linux Conference Europe 2019

Event Report
October 28–30, 2019
Lyon, France



Open Source Summit & Embedded Linux Conference Europe 2019 attracted more than 2,100 developers and technologists from 1,150 organizations around the globe for collaboration and education.

This year's event attracted a strong mix of professionals from across the open source ecosystem, including nearly 300 senior executive and C-level professionals. Developers and architects comprised 62% of 2019 attendees. **Overall, 69% of attendees were in technical positions.**

Open Source Summit & ELC Europe 2019 welcomed attendees from 67 countries with 59% of attendees hailing from Europe and 17% from North America. 56% of attendees were at the event for the first time. Of attendees surveyed, **36% attend only one conference annually**, while 88% attend 4 or fewer conferences a year, **making Open Source Summit & ELC Europe a valuable place to connect with this audience.**

98% of attendees surveyed said that this year's events were a valuable use of their time.

Exceptional Content

Featuring more than 300 keynote, breakout, and birds of a feather sessions, along with speaker office hour sessions, tutorials and workshops, Open Source Summit & ELC Europe 2019 delivered outstanding content across a variety of important open source topics: AI, Best Practices for OS Development, Infrastructure & Automation, Compliance, Diversity, Embedded Development, Linux Systems, Growing & Sustaining OS Communities, Networking & Edge, IoT, Security & Safety. The combined calls for proposals across both events drew nearly 900 submissions, giving program committees the challenging job of selecting talks, but providing top-tier content for attendees. **Over 90% of surveyed attendees found conference sessions to be informative and useful to attend.**

In addition to content provided by industry leaders, Open Source Summit & ELC Europe 2019 hosted a bustling sponsor showcase featuring nearly 50 sponsor booths. Attendees packed the showcase each day to learn about the latest projects and products and interact with sponsors and other community members. **95% of attendees surveyed indicated that they visited sponsor booths.**



Diversity

20% of speakers at OSSEU + ELCEU 2019 identified as women or non-binary, an 8% increase from 12% in 2018.

Women and non-binary individuals comprised 15% of attendees this year, a 3% increase from 2018.

Our goal for 2020 is to increase both of these numbers to 25%. We will be increasing efforts moving forward to help grow these numbers in 2020 and beyond.

Community Support

To encourage and increase the participation of a diverse community, The Linux Foundation is pleased to offer diversity and need-based registration scholarships and travel funding to our conferences. For Open Source Summit & Embedded Linux Conference Europe 2019 this year, we provided:

- 89 Diversity Travel Funding Scholarships and 99 Diversity Registration Scholarships
- 17 Need Based Travel Funding Scholarships and 124 Need-Based Registration Scholarships

In total, we funded \$102,000 in travel funding and granted over \$150,000 in registration scholarships.



Even More Great Event Experiences

Beyond top-notch educational content, Open Source Summit & ELC Europe 2019 offered a plethora of activities designed to connect and strengthen our community and attendees' experiences, including the:

- Partner Reception at Oscar Restaurant and Closing Desserts & Drinks Reception at La Plateforme
- Morning activities including a 5k fun run and a sightseeing tour of Lyon
- First-time Attendee Breakfast, which attracted 221 attendees new to this year's event to connect with one another as well as long-time attendees
- Better Together Diversity Social, which welcomed underrepresented minorities in tech
- Women in Open Source lunch sponsored by Google, which connected women and non-binary attendees
- Speed Networking & Mentoring session which enabled 30+ attendees to learn from and discuss professional goals and challenges with veterans and leaders in the open source community
- The ELC Technical Showcase featuring demos & posters from a variety of FOSS projects.

Save The Date for 2020

Save the date for Open Source Summit & Embedded Linux Conference Europe 2020 in Dublin, Ireland - October 26-28, 2020.




Event Demographics

Total Attendees:
2,172

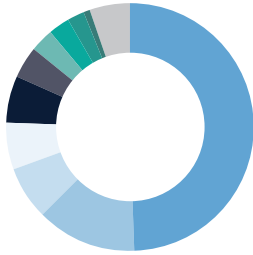
1,150 
Organizations Represented

Attendees from
67 
Countries

69% 
of Attendees in **Technical
Positions**

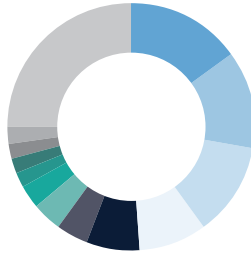


Attendee Demographics



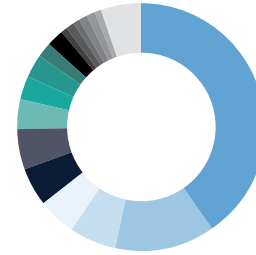
Job Function

- Development/Engineering **49%**
- Architecture **13%**
- Student **7%**
- Marketing / Business Dev **6%**
- Executive Management (VP/CxO) **6%**
- Operations - Sys Admin **4%**
- Program Management **3%**
- Product Management **3%**
- Professor/Academic **2%**
- Legal / Compliance **1%**
- Other **5%**



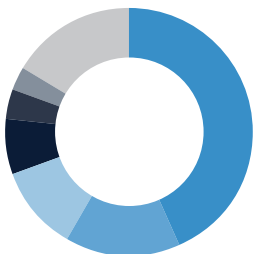
Country

- United States **15%**
 - Germany **13%**
 - France **12%**
 - India **9%**
 - United Kingdom **7%**
 - Switzerland **4%**
 - Sweden **4%**
 - Netherlands **3%**
 - Japan **2%**
 - Norway **2%**
 - Finland **2%**
 - Italy **2%**
 - Other **25%**
- Austria
 Belgium
 Bulgaria
 Canada
 China
 Costa Rica
 Croatia
 Czech Republic
 Denmark
 Greece
 Ireland
 Israel
 Poland
 Romania
 Russian Federation
 South Korea
 Spain
 Taiwan
 Turkey
 Ukraine



Industry

- Software **40%**
- Computer Hardware or Consumer Electronics **13%**
- Internet or Web Services **6%**
- Education / Research **5%**
- Automotive / Transport **5%**
- Industrial Manufacturing & Machinery **5%**
- Telecommunications **4%**
- Non-Profit Organization **3%**
- Finance/Banking/Insurance **3%**
- Government **2%**
- Energy **2%**
- Media / Publishing **1%**
- Transportation / Logistics / Warehousing **1%**
- Healthcare **1%**
- Carriers / Telecommunications **1%**
- Aerospace / Defense **1%**
- Retail / E-Commerce **1%**
- Other **5%**



Job Level

- Individual Contributor **43%**
- Manager **15%**
- Academic **11%**
- Director **7%**
- CXO / ED **4%**
- VP **3%**
- Other **16%**



Videos & Photos

Keynote Videos: <https://www.youtube.com/playlist?list=PLbzoR-pLrL6pamOj4UifcMjf560Ph6mJp>

Event Photos: <https://www.flickr.com/photos/linuxfoundation/albums/72157711547821187>

Social Media Highlights

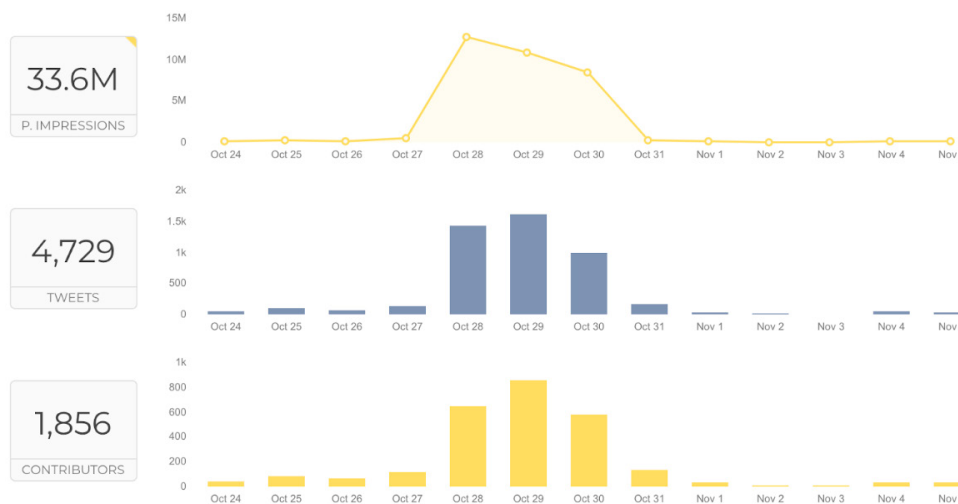
Coverage window spans Thursday, October 24 - Tuesday, November 5

LinkedIn: The Linux Foundation's LinkedIn followers increased by 2,123 users during the window with 441 engagements.

Twitter (@linuxfoundation & @EventsLF)

- Tweets from @linuxfoundation and @EventsLF garnered 1,500,000 impressions over the event window.
- 1,027 Twitter users joined the combined 333k users currently following The Linux Foundation and LF Events Twitter channels.
- Sentiment on Twitter engagement was 96.5% positive.
- Twitter engagement spiked with over 5,700 engagements during the event window.

Engagement with #OSSummit during the event window (impressions, total tweets & contributors):



33.6M
P. IMPRESSIONS

4,729
TWEETS

1,856
CONTRIBUTORS

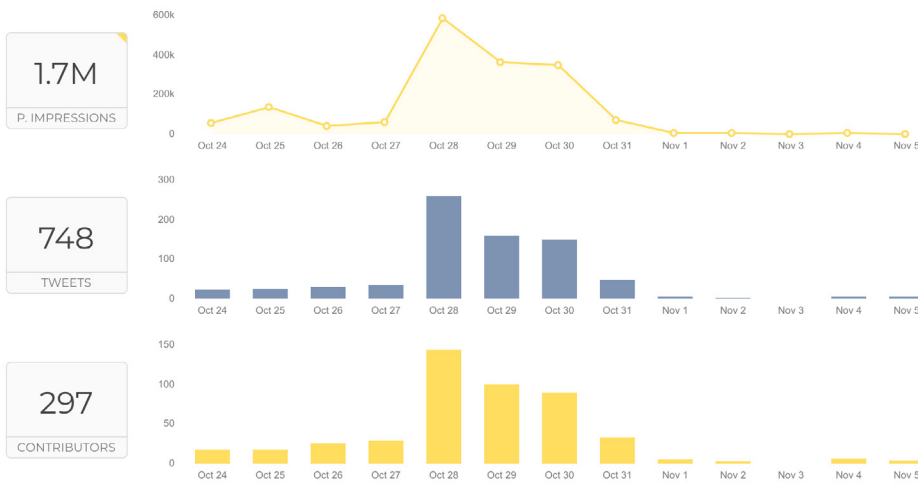
AVG TWEETS/DAY
363.8

TWEETS/CONTRIBUTOR
2.5

POTENTIAL IMPRESSIONS/DAY
2.6M

POTENTIAL IMPRESSIONS/TWEET
7,107





















Engagement with #lfelc during the event window (impressions, total tweets & contributors):



AVG TWEETS/DAY	TWEETS/CONTRIBUTOR	POTENTIAL IMPRESSIONS/DAY	POTENTIAL IMPRESSIONS/TWEET
57.5	2.5	128.5k	2,234

Below were the this year's most retweeted tweets.

	1 - 25 of 5,090 Tweets	TIME	RETWEETS ▼	REPLIES	POTENTIAL DIR. IMPRESSIONS	POTENTIAL AMP. IMPRESSIONS
	Maya Kaczorowski @MayaKaczorowski - 76.6% of top 1000 Docker images have severe known vulns - 44% of docker image vulns can be fixed with newer base images - 20% of docker image vulns can be fixed by rebuilding @liran_tal #OSSummit	Oct 29, 2019, 7:01 AM	187	0	4,787	238.4k
	The Linux Foundation @linuxfoundation Linus Torvalds at Open Source Summit Lyon - "On the developer side, commit messages to me are as important as the code changes themselves." #ossummit	Oct 29, 2019, 1:18 AM	63	0	329.1k	428.5k
	Peace Ojemeh #OSSummit EU, Lyon 🇵🇸! @Peace_Ojemeh and @Samson_Goddy and I just met Linus Torvalds then creator of #linux and #git!!! at the #OSSummit	Oct 29, 2019, 4:29 AM	55	0	1,528	50k

 Samson Goddy   #OSSummit Lyon 🇫🇷 🔥 🔥	@Samson_Goddy	51	0	3,176	55.3k
<p>..@Peace_Ojemeh and I just met the creator of #Linux and #Git, Linus Torvalds. Safe to say, it was a great day 🔥 🔥 🔥 . #OSSummit #ossEU Oct 29, 2019, 4:26 AM </p>					
 Maya Kaczorowski @MayaKaczorowski	only ~7% of npm maintainers have 2FA enabled -> ~6% of packages in npm 0% on Docker Hub... because it just rolled out last week. Also do everyone a favour and enable this docs.docker.com/docker-hub/2fa @liran_tal #OSSummit	41	0	4,785	150.2k
<p>Oct 29, 2019, 6:46 AM  View Report</p>					
 The Linux Foundation @linuxfoundation	"Git proved I am not a one-hit wonder." - Linus Torvalds #ossummit	40	0	329.1k	359.6k
<p>Oct 29, 2019, 1:28 AM </p>					
 TODO Group @todogroup	📄 "Open Source Program Management 2019 Survey Results" todogroup.org/blog/survey-20... #ossummit	32	1	2,654	175k
<p>Oct 28, 2019, 1:44 AM </p>					
 The Linux Foundation @linuxfoundation	Over work kills creativity. - Rahaf Harfoush #ossummit	30	0	329.3k	345.8k
<p>Oct 30, 2019, 1:28 AM </p>					
 Maya Kaczorowski @MayaKaczorowski	why you should pick a minimal base image @liran_tal #OSSummit	26	0	4,787	28.6k
<p>Oct 29, 2019, 7:01 AM </p>					
 Jacob Green @jacoblyopen	"Open source is one of the most successful enablers of global innovation in history." @linuxfoundation #OSSummit	26	0	69	46.1k
<p>Oct 28, 2019, 1:24 AM </p>					
 Open Source Community Africa @oscafrica	Interested about what we are doing? Come talk to us. Also join us for our session tomorrow. "Building the Next Billion Creators" October 30, 2019 11:30 - 12:05 St. Clair 3 #OSSummit #OSSEU	25	0	2,787	38.5k
<p>Oct 29, 2019, 1:43 AM </p>					
 iExec @iEx_ec	iExec is at the #OSSummit this week. It's been great to see our partners in our own home town of Lyon, France. 📍 As well as meeting others sharing the same passion for open source technology, with an emphasis on confidential and trusted computing. by @linuxfoundation	24	0	25.2k	45.3k
<p>Oct 29, 2019, 10:34 AM  View Report</p>					

Media & Analyst Results

As awareness and excitement swell around open source as the new norm, press and analysts are eager to attend the event. Thanks to news announcements from The Linux Foundation, its projects and event sponsors, Open Source Summit + Embedded Linux Conference Europe saw 1,102 media clips during the events window. The aggregate readership for OSS + ELC Europe 2019 was 673,198,820 between online news and blogs.

We welcomed a diverse selection of key European technology publications to the event such as The Register, TechRadar, Data Economy and Linux Format from the UK, Irish Tech News from Ireland, Heise, Golem.de, Linux Magazine from Germany, Techtartget's French tech site, LeMagIt.fr and one of the key technology sites from the Netherlands, Computable.nl. Important tech and open source reporters such as veteran UK journalists Tim Anderson and Antony Savvas, key German tech journalists Udo Seidel, Hartmut Wiehr and Kristian Kissling, as well as Steven Vaughan-Nichols of ZDNet were invited to attend keynotes, sessions, and evening events.

Media Highlights

Find just a few media highlights from this year's event below.

Compilando Podcast - [Open Source Summit Europe 2019 by The Linux Foundation – English Edition Podcast - Interviews with Jim Zemlin and Others](#)

Computable.nl - [Linus Torvalds Main Task is Answering Email](#)

Data Economy - [Linux Shows Its Mettle When It Comes To New Cloud And Edge Applications](#)

FossBytes - [Linus Torvalds: "I don't know coding at all anymore"](#)

Golem.de - [Machine Learning Alone Will Not Find Any Bugs](#)

Golem.de - [Open Source, As it Should Be](#)

Golem.de - [The Linux Kernel Gets Consistent Test Environment](#)

Heise.de - [Linux Foundation: Open Source in Responsibility](#)

Irish Tech News - [Linux Foundation's Ambitious Open Mainframe Project for Enterprises - Interview with John Mertic](#)

Irish Tech News - [Neutral Governance Through Open Source Projects, Kate Stewart](#)

Irish Tech News - [Open Source Summit Europe, 28th, October, Lyon](#)

Irish Tech News - [The Linux Foundation Announces Full Agenda for Open Source Summit and Embedded Linux Conference Europe](#)

LeMagIT.fr - [Jim Zemlin: "The Only Thing That Can Slow Down Open Source are Security Issues"](#)

LeMagIT.fr - [KernelCI: The Linux Kernel Finally Has Its Official Testing Framework](#)

Linux Magazine Germany - [Greg Kroah-Hartman and Jonathan Corbet on Patchy Patching, Multithreading and Rust Modules](#)

Linux Magazine Germany - [KernelCI Platform Becomes Linux Foundation Project](#)

MacGeneration - [Greg Kroah-Hartman: Spectrum and Zombieload "You Have to Choose Between Security and Performance"](#)



MacGeneration - [Linus Torvalds: 'I'm Not a Programmer Anymore'](#)

TechRadar - [Helping Build Secure Software is of Utmost Importance to GitHub](#)

TechRadar - [There's More to Container Isolation Than the Technology](#)

TechRepublic - [Linus Torvalds: "Git Proved I Could be More Than a One-Hit Wonder."](#)

The Register - [Annoyed by Too Many Kernel Testing Projects? Good News. Linux Foundation Anoints Chosen One - KernelCI](#)

The Register - [Linux Kernel is Getting More Reliable, Says Linus Torvalds. Plus: What Do You Need to Do to Be Him?](#)

The Register - [Pro-Linux IP Consortium Open Invention Network Will 'Pivot' to Take on Patent Trolls](#)

The Register - [Running on Intel? If You Want Security, Disable Hyper-threading, Says Linux Kernel Maintainer](#)

ZDNet - [Automated Testing Comes to the Linux Kernel: KernelCI](#)

ZDNet - [GitHub: All Open-Source Developers Anywhere Are Welcome](#)

ZDNet - [Linus Torvalds: 'I'm Not a Programmer Anymore'](#)

ZDNet - [Open Invention Network Comes to GNOME's Aid in Patent Troll Fight](#)

ZDNet - [Top Linux Developer on Intel Chip Security Problems: 'They're Not Going Away.'](#)

What Attendees Are Saying

Don't take our word for it. See what attendees had to say about OSS & ELC 2019 Below:

OSS Europe is my favourite conference. I love the diverse group of people from many different countries who attend. It is a friendly conference, where I always come away with lots of new ideas and new friends.

- JEFF SHAW

The event gets your creative juices flowing. It helps provide clarity on what's important and how to achieve it.

- ADAM J. MCPARTLAN

A highly worthwhile conference exploring many aspects of open source and bringing together a wide variety of people from many companies, organizations and countries. Intellectually stimulating and friendly. Recommended.

- CHRISTIAN PATERSON

The keynotes were spot-on interesting and inspirational. I really enjoyed the conference this year and the open source and community activism sessions.

- LIRAN TAL, SNYK

Empowering individuals and enterprises with unlimited engineering potential.

- DINESH KUMAR

The conference offered me a great opportunity to meet people from the community, follow technologies and stay up to date. It's really great to get face-to-face ideas from people I've worked on the same topic and to know that I can contact them after the conference. It was a good experience and opportunity for me.

- KÜBRA CINGILLI

Hi folks! the OSS 19' was amazing, so many people there with a high technical level and aiming to do networking. I encourage you to attend the next time, the experience was incredible.

- JUAN MANUEL PARRILLA, SENIOR SOFTWARE ENGINEER @REDHAT

The best inclusive conference of the year. Talks, people, sponsors and project are just amazing.

- NICOLA MANICA

A great event to connect with smart people who share a passion for open source!

- KATRINA NOVAKOVIC, RED HAT

The best event in open source in Europe.

- ANTOINE THOMAS

An event filled with technical in-depth knowledge, inspiring speeches and valuable connections with a strong focus on using both the advantages and power of the open source Linux community to collectively raise standards, move forward and ultimately improve humanity as well as discovering sustainable ways to protect our planet.

- KATJA LATOUR

I managed to attend every edition of the Embedded Linux Conference Europe since the beginning. I always get back from the conference with a huuuuuge list of new ideas to explore. This conference is a great way to stay up to date with the developments in open-source projects that matter in embedded, and to meet the maintainers and fellow developers.

- MICHAEL OPDENACKER, BOOTLIN

This was my first attendance to the ELCE. I have strong system skills but I only did minor developments in Linux kernel up to now so I was wondering how I would feel among all those Linux experts... My fear was not justified ! I really appreciated the atmosphere of this conference, with a very good spirit and full inclusion of all attendees. Experts are essentials to animate this event but beginners are really welcome!

- GERALD BAEZA

The mood and the great power that the crowd emanates...big things can happen when all, with no discrimination nor distinction, work together to build something new and better.

- MAURO SALVINI

OSSummit from the Linux Foundation is definitely an event you want to attend at least once. Multiple presentations on plenty of topics. Furthermore, it's the most welcome environment I've ever been. They take inclusion and diversity very seriously, not just words. Don't miss it.

- FLORENT ZARA

The technical and spot on keynotes from the industry leaders were truly awesome!

-THOMAS VADAH, NTE MARKED AS

Incredible passionate people coming together to discuss things that will shape the future itself.

- VEDARTH SHARMA

Warm and welcoming people at OSS & ELC EU 2019. Great networking oppprtunities and interesting keynote sessions. A big thumbs up to the event.

- TARUSHI GUPTA



OpenSourceInitiative @OpenSourceOrg
 Thank you @linuxfoundation for including us as a community partner and for all your support at #OSSummit.

6:56 AM · Oct 28, 2019 · Twitter for Android

Priyanka Sharma @ Paris @prikanka
 Hearing @here present at #OSSummit #ifelc in Lyon! Learned that they track info about over 100 Million vehicles and collect 28TB of data everyday! They also have a team in 🇮🇳 and are a big presence in open source. So impressed.

5:10 AM · Oct 30, 2019 from Lyon, France · Twitter for iPhone

dbahi @db_is_me
 A glimpse of what it takes to coordinate a keynote presentation. @linuxfoundation #OSSummit

5:46 AM · Oct 30, 2019 · Twitter for Android

Manrique @smanrique
 #OSSummit 🇫🇷 🇮🇹 is over! Once again, congrats to @EventsLF, @angelatif, and everyone in the team for an amazing event 🙌🙌🙌

OpenSourceSummit_EU_Lyon_191029_highres-191
 Explore linux_foundation's 26981 photos on Flickr! [flickr.com](#)

5:00 AM · Oct 31, 2019 · Twitter for Android

Suzanne Ambiel @rosso_velo
 From the VMware Open Source Summit EU (awesome) team to @linuxfoundation #OSSummit: Thanks for a great event! (PS: tabs - 207, spaces 246) @vmwopopensource

4:42 PM · Oct 30, 2019 · Twitter for iPhone

credativ Group @credativ
 Again, we are so happy to be sponsor of this years #OSSummit Europe in Lyon - Thanks to all the organizers! @EventsLF

5:00 AM · Oct 31, 2019 · Buffer

Samson Goddy @Samson_Goddy
 ..@Peace_Ojemeh and I just met the creator of #Linux and #Git, Linus Torvalds. Safe to say, it was a great day 🙌🙌🙌

#OSSummit
 #ossEU

Linus Torvalds and 3 others

7:26 AM · Oct 29, 2019 from Lyon, France · Twitter for Android

Christian Paterson @CPaterson2015
 @Nicolas_T_T and #OSSummit fun after a very rich and interesting #opensource conference 🙌

3:04 PM · Oct 30, 2019 · Twitter for iPhone

k-leb k @dcaidemon
 O yay #OSSummit

2:42 PM · Oct 30, 2019 · TwitPanePlus



Open Apparel Registry
 @openapparelreg

Delighted to have taken issues of **#sustainability** in **#fashion** & what we're doing with the Open Apparel Registry into the heart of the **#opensource** community @linuxfoundation conference today. Check us out on GitHub: github.com/open-apparel-r... **#ossummit #ifelc**

10:20 AM · Oct 30, 2019 · Twitter for iPhone

ihor dvoretzkyi
 @idvoretzkyi

I'm at **#OSSummit** and I love the location 🍷

2:06 AM · Oct 30, 2019 · Twitter for Android

Hear How You Like To Hear
 @like_to_hear

Saying goodbye to **#OSSummit** - it was awesome to get to know so many new aspects of **#opensource** thanks @EventsLF for the great time :)

10:28 AM · Oct 30, 2019 · Twitter Web App

Steven Tan
 @stevenphtan

A beautiful 10k run by soane river and old town thanks to **#OSSummit #10k #running #Lyon #vieuxlyon**

5:28 AM · Oct 30, 2019 from Rhône-Alpes, France · Twitter for iPhone

Peggy Sylpp
 @pegx_

@rahafharfoush bestselling author, **#digital #anthropologist**, searches for the answer to her **#burnout**, considering history of **#productivity** and **#creativity** - back to the enlightenment, very inspiring! **#OSSummit**

4:14 AM · Oct 30, 2019 from L'Amphithéâtre - Salle 3000 · Twitter for Android

IntelOpenSource
 @intelOpenSource

From our keynote from @kelly_in_tech, to our demos, to our lightning talks, **#OSSummit EU** was a success. We ❤️ showcasing our open source projects. Check them out here, too: **01.org**

2:16 PM · Nov 1, 2019 · Twitter Web App

Nithya Ruff
 @nithyaruff

Love the **#firsttimer** breakfast and how many new attendees are here today. Speaks to new industries and new sectors adopting opensource **#OSSummit**

4:29 AM · Oct 28, 2019 · Twitter for iPhone

Sergio Prado
 @sergioprado

This week I had a fantastic experience at Embedded Linux Conference Europe in Lyon. A lot of very good technical sessions, new friends and full room in my talk about Linux kernel debugging! **#embedded #linux #kernel #ossummit @eventsLF @linuxfoundation**

1:31 AM · Oct 31, 2019 · Twitter Web App

Mathieu Acher @ **#OSSummit #OSSEU19**
 @achern

Embedded **#Linux** conference was a blast, maybe one of the best conference I've attended: diversity of topics, quality of presenters, in-depth and technical content, and many*many exchanges with people that want to understand, share, and help. **#OSSummit**

1:05 PM · Oct 30, 2019 · Twitter Web App

