



THE **LINUX** FOUNDATION
SPRING MEMBER MEETING

Looking Forward to 2021 and Beyond

Jim Zemlin / The Linux Foundation

2020 proved that we need to work together
in tough times.

After a VERY challenging 2020, Linux Foundation is off to its best start ever



- We exceeded 2M trainings and exams delivered in January
- We are adding new members at our fastest rate ever: more than one a day
- We are adding 2-3 new projects a week: 34 launched or will launch in 1Q21
- We Announced [A Racial Justice Initiative](#)
- Launched a new [Security Initiative for the Linux Kernel](#)
- Announced a [New Self Sovereign Identity Effort](#)
- Started a new [5G R&D Effort](#) and a new [5G Packet Core Effort \(Magma\)](#)
- Launched a [Mobile Native Foundation](#) to make it easier to build large scale mobile apps
- We created publications on [Supply Chain Security](#) and more
- AND... Today we are announcing several other new initiatives

In 2021 we are privileged home to some of the most important technology projects on earth (and mars)



Security	Let's Encrypt	CORE INFRASTRUCTURE INITIATIVE	OpenSSF OPEN-SOURCE SECURITY FOUNDATION	Falco	./rtp	CONFIDENTIAL COMPUTING CONSORTIUM	sel4 Security. Performance. Proof.	OPEN SECURITY CONTROLLER	
Networking	OLFNETWORKING	ONAP OPEN NETWORKING ARCHITECTURE PROJECT	OPEN DAYLIGHT	.io	Anuket	CLUSTER DUCK PROTOCOL	DENT	DANOS	
Cloud	CLOUD NATIVE COMPUTING FOUNDATION	kubernetes	argo	envoy	KUDO	Crossplane	CLOUD FOUNDRY		
Automotive	AUTOMOTIVE GRADE LINUX	ELISA ENABLING LINUX IN SAFETY APPLICATIONS	KernelCI						
Blockchain	HYPERLEDGER	HYPERLEDGER FABRIC	HYPERLEDGER SAWTOOTH	ACCORD PROJECT	ERGO	DIF			
Edge/IoT	OLFEDEGE	YOCTO PROJECT	Zephyr™	ACRN	Dronecode	FLEDGE	SOUND OPEN FIRMWARE	OpenEEW	
Web	node	OpenJS Foundation	GraphQL	appium®	jQuery	REACTIVE FOUNDATION	DOJO	ESLint	
AI	OLFAI	ONNX	HETERODYNE	DELTA LAKE	ForestFlow	JanusGraph	kepler.gl	LUDWIG	soda foundation
Film	ASWF ACADEMY SOFTWARE FOUNDATION	OpenColorIO	OpenVDB	OpenEXR	OpenTimelineIO	OpenEXR	OS! Open Shading Language		
CI/CD	CD FOUNDATION	Jenkins	Spinnaker	TEKTON	TERN	StackStorm	Vitesse	etcd	SPIRE
Energy	OLFENERGY	RIAPS	EM2	POWSYBL	GXF	CoMPAS	OPENEEMETER	OPERATORFABRIC	
Hardware	RISC-V	OpenPOWER™	CHIPS ALLIANCE		UNIMATRIX	3MF CONSORTIUM			
Standards	ALLIANCE FOR OPEN MEDIA	OPENCHAIN	COMMUNITY DATA LICENSE AGREEMENT	JOINT DEVELOPMENT FOUNDATION	CIM CLOUD INFORMATION MODEL	CHAOS	OPEN MANUFACTURING PLATFORM		

From Open Source Repo to International Standards: We have a range of collaboration tools for collective innovation



Capabilities Required to Engage:

- Legal coordination and structures
- Industry vertical experience
- Technical sector experience
- Successful track record

Capabilities Required to Scale:

- Self-service options
- Umbrella and flexible structures
- Membership model & network effects
- Systems and process focus
- Rigorous IP mgmt and security focus

SPDX accepted as international standard for how open source metadata is shared



As a critical part of the global tech supply chain, creating a reliable, secure, and sustainable technology effort requires many moving parts



11.7M

Lines of Code
Added Weekly



9.4M

Lines of Code
Removed Weekly



208,660

Contributing
Developers



12,435

Contributing
Companies



16,618

Repositories



9.1M

Commits



960,610

Pull Requests



1.3M

Builds Monitored



859,150

Logged Issues



5.2B

Container
Downloads



1.6M

Group Chat
Messages



3.6M

Group Email
Messages



4,532

Scanned
Repositories



282,342

Open
Vulnerabilities



62,379

Recommended
Fixes



36,163

Vulnerabilities
Fixed



28,496

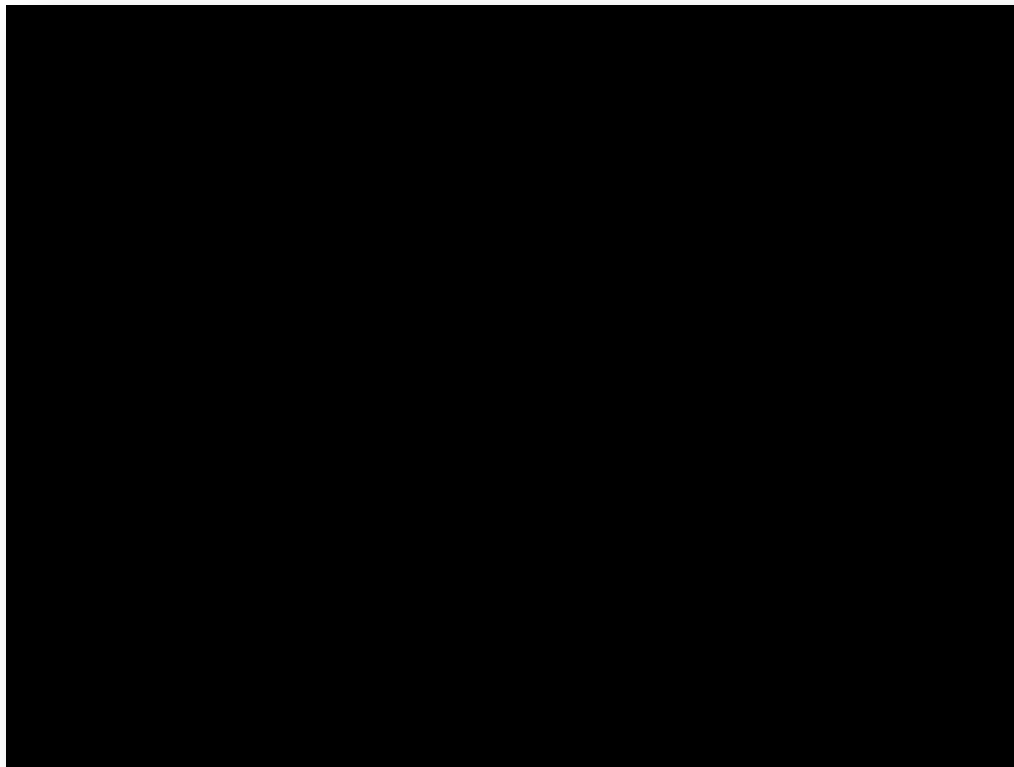
CLA
Contributors

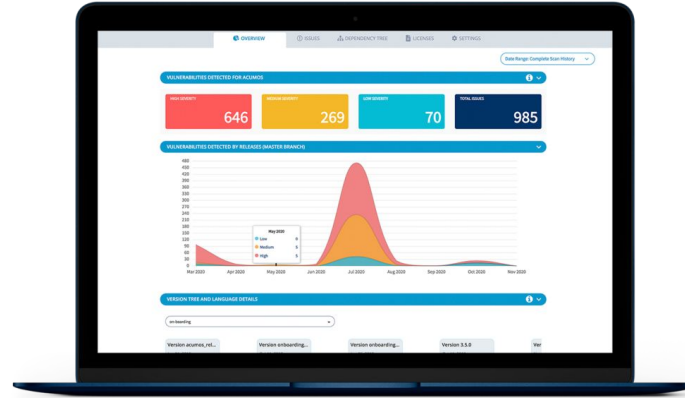
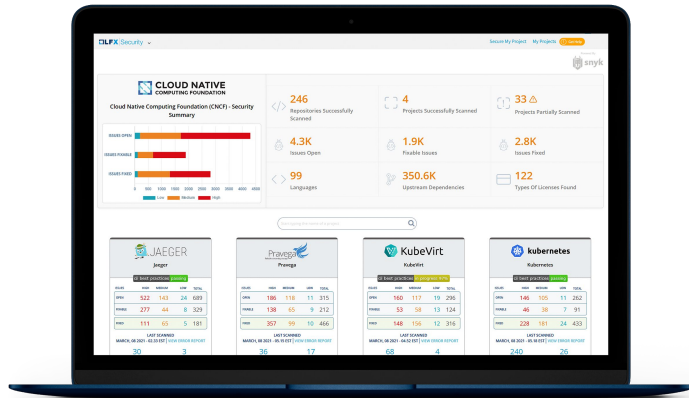


26,998

Community
Meetings

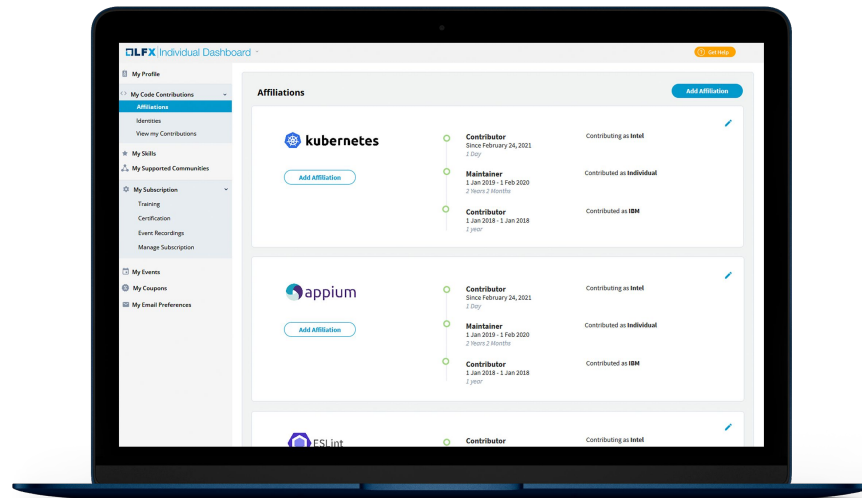
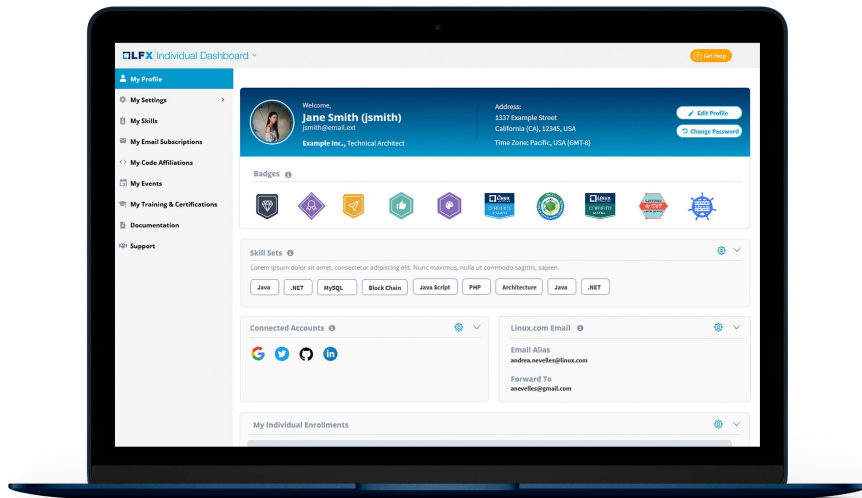
We created LFX to help our communities innovate and scale

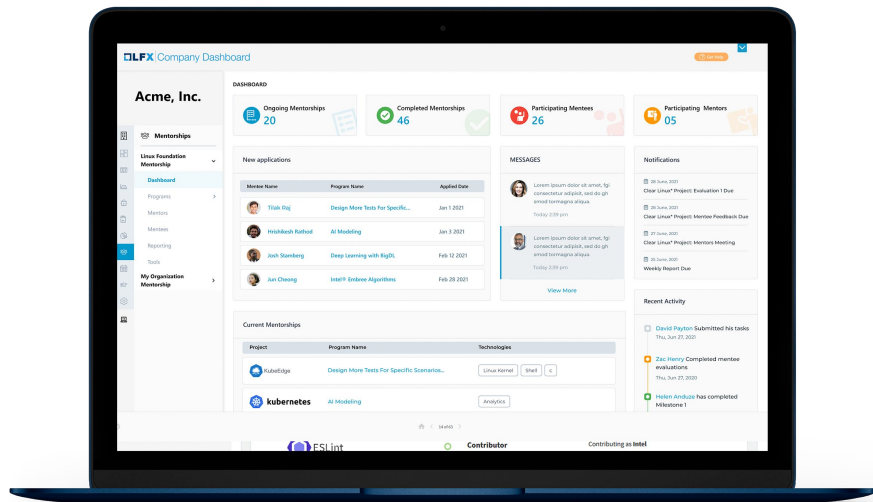
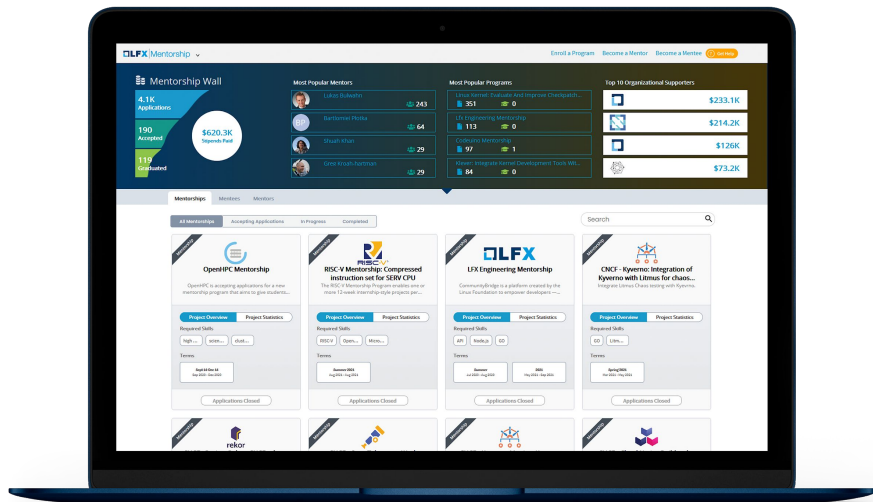


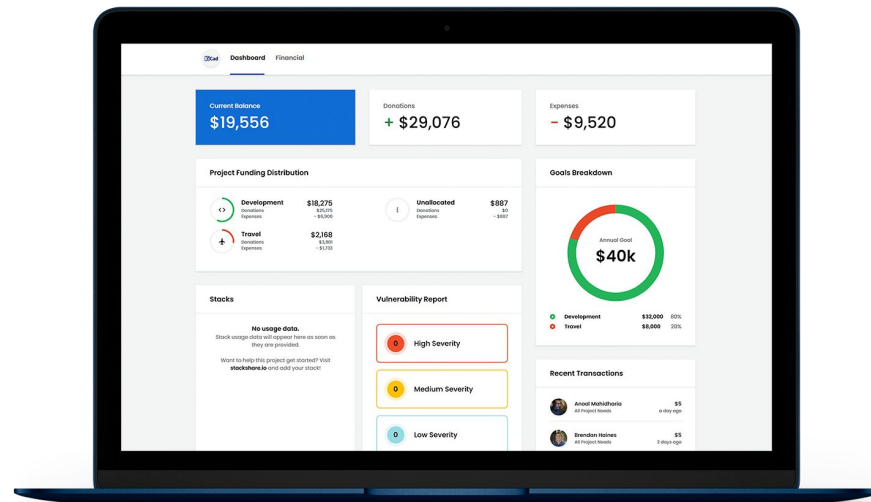
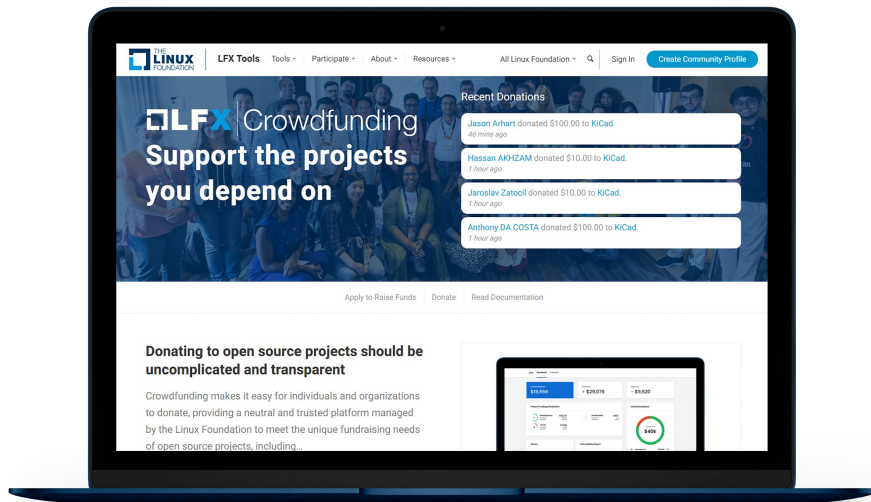


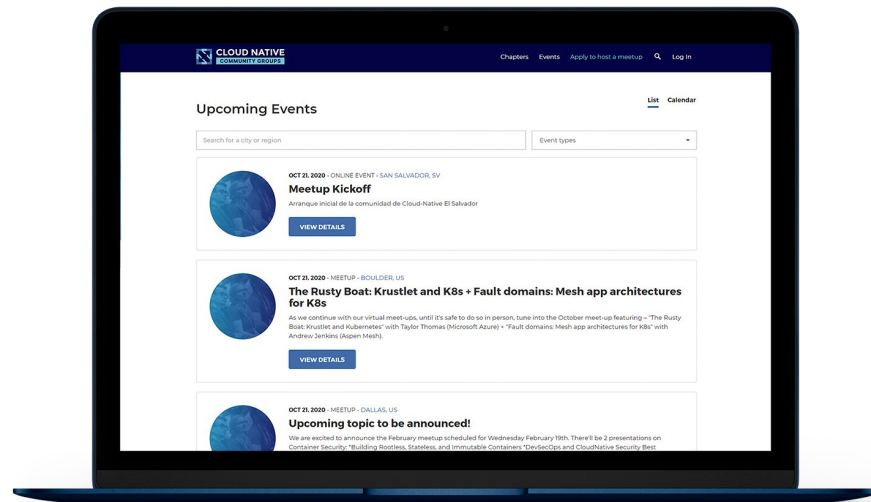
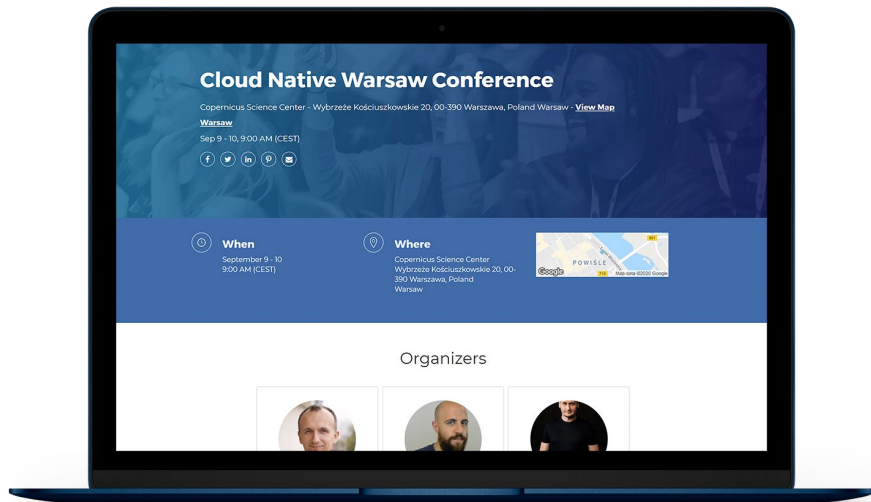
Reference	Project	Severity	CVSS	CVSS V2	CVSS V3	Fixed	Fixed	Fixed	Fixed
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CVE-2020-15258	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15259	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15260	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15261	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15262	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15263	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15264	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15265	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15266	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15267	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15268	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15269	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15270	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
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CVE-2020-15272	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15273	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15274	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
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CVE-2020-15279	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
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CVE-2020-15297	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15298	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15299	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO
CVE-2020-15300	SECURITY	CRITICAL	9.8	10.0	10.0	NO	NO	NO	NO

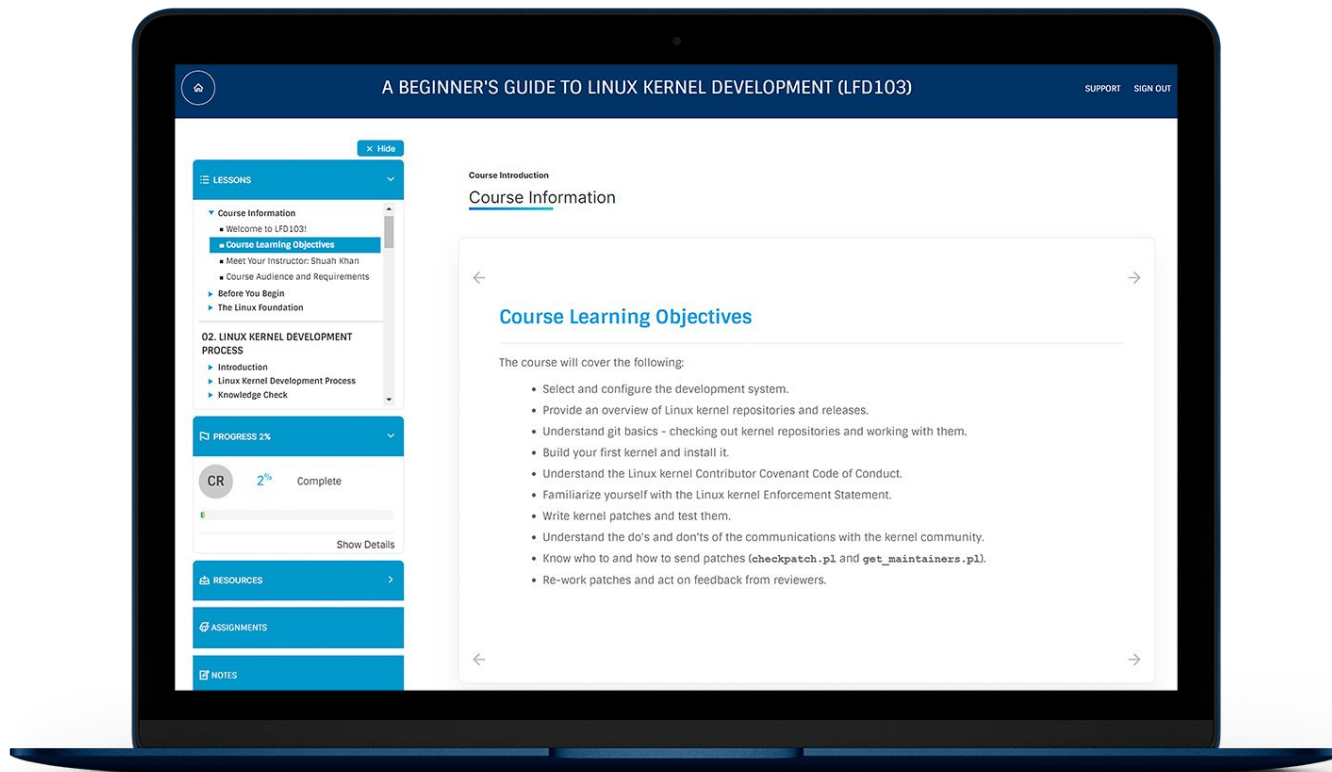
OLFX Individual Dashboard

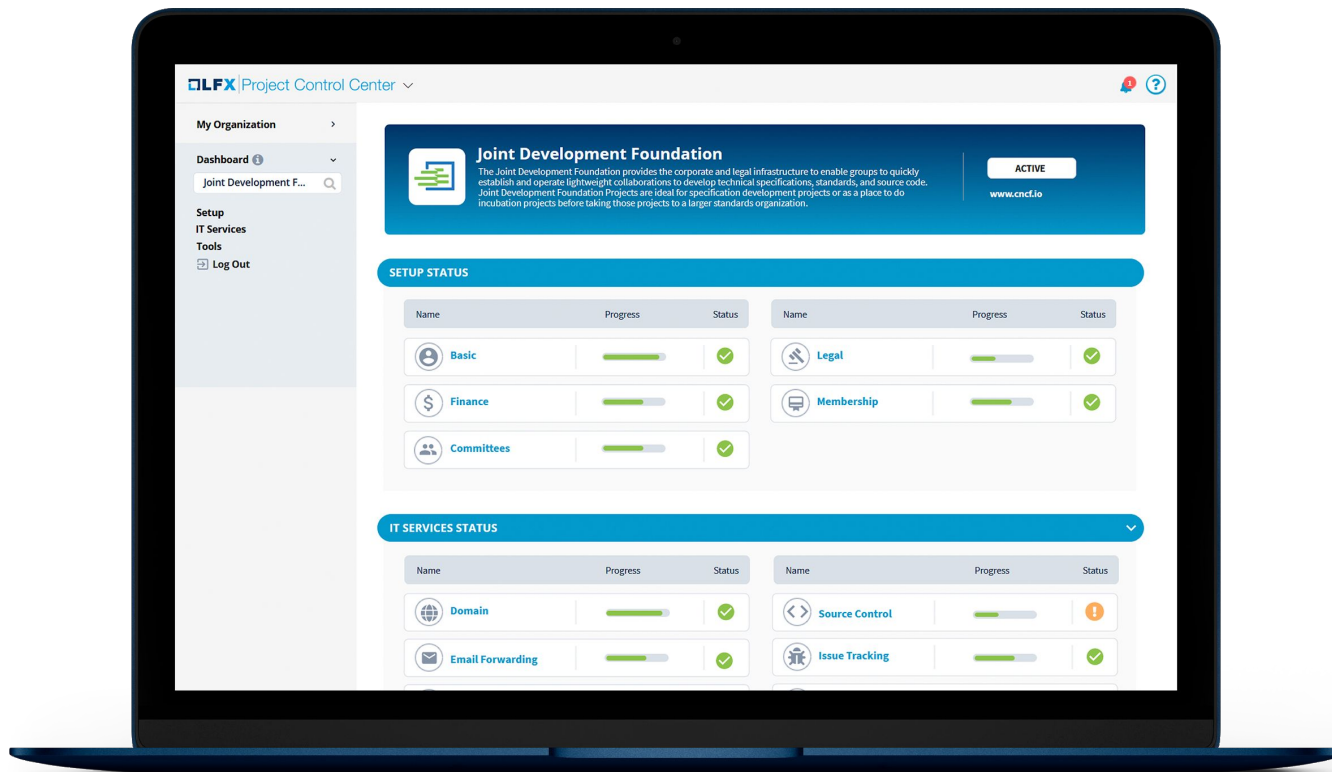


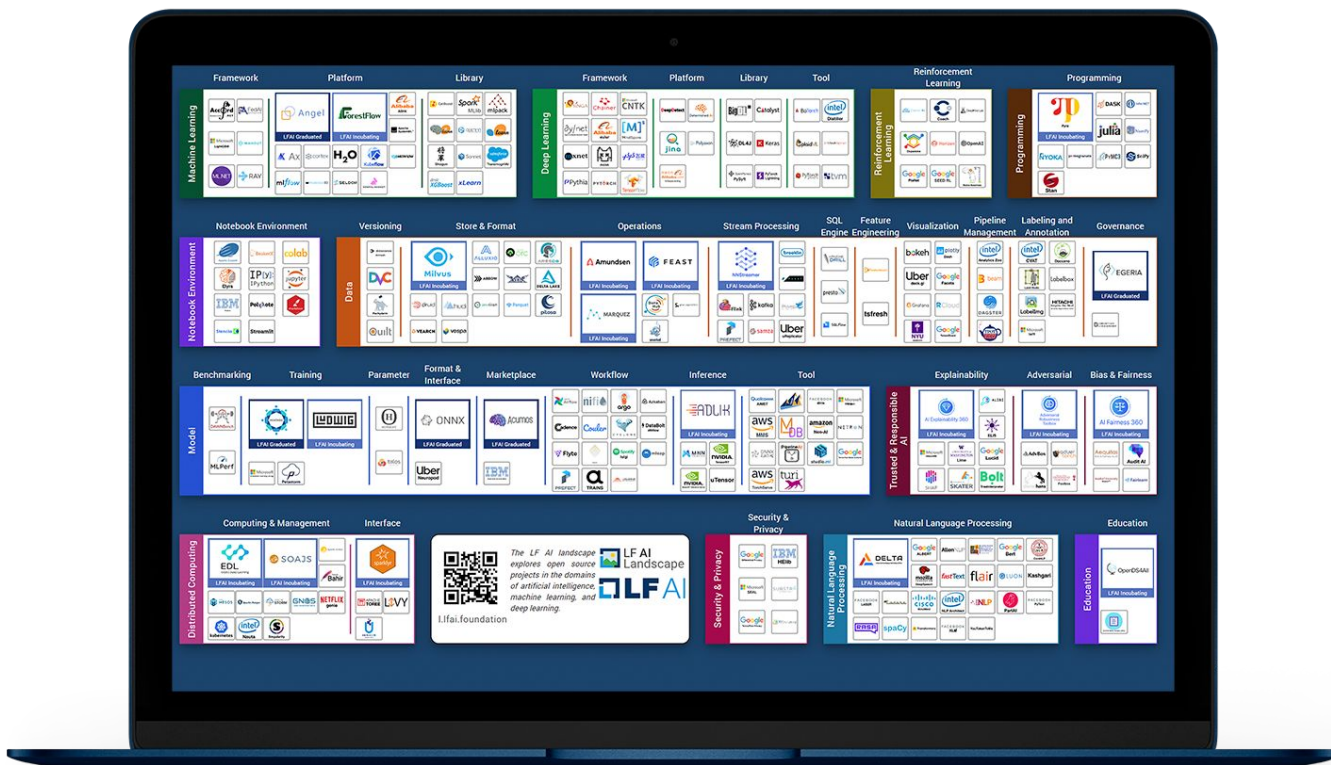




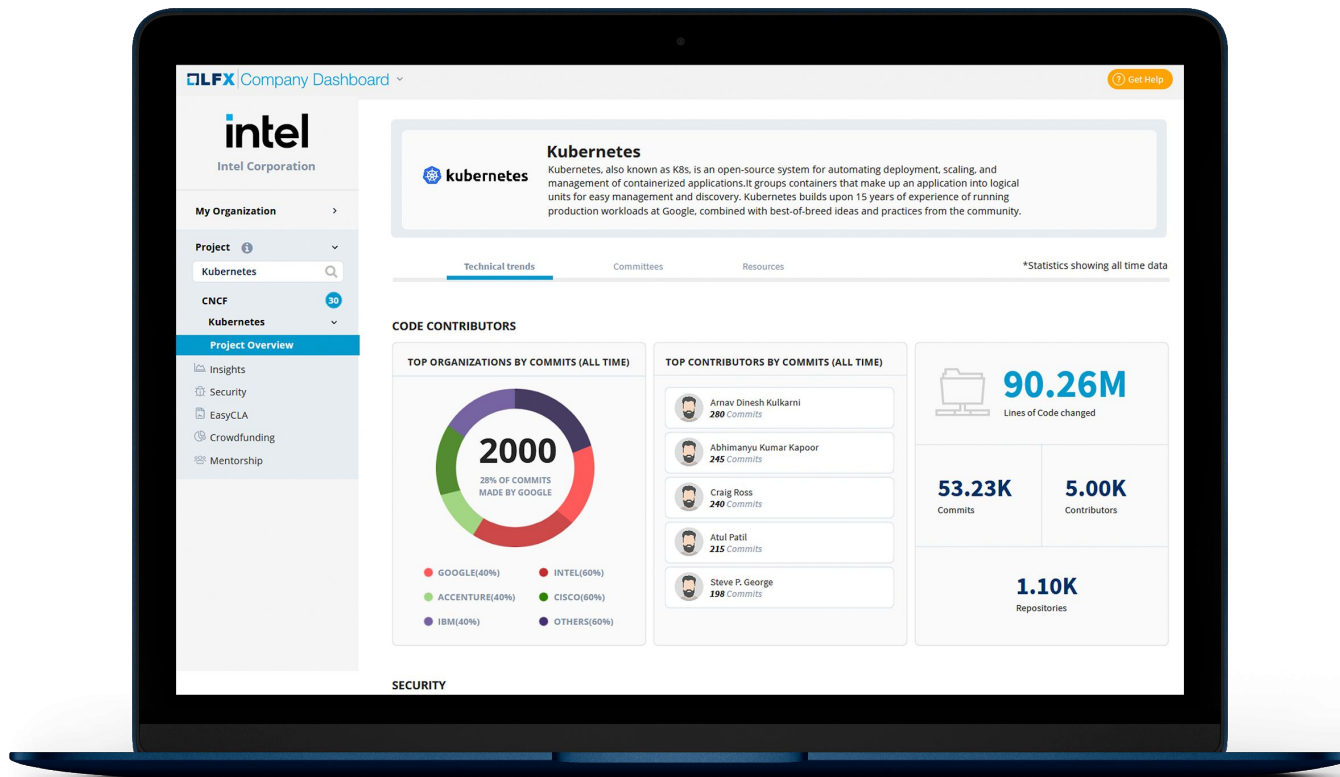








OLFX | Organization Dashboard



Open source challenges in 2021

1

Security

2

Diversity

3

**Getting
Together in
Person Again**

Open source challenges in 2021



Security



Diversity



**Getting
Together in
Person Again**

Open Source Security Foundation (OpenSSF) since October



- As of Feb: 36 member organizations, 263 individual participants
- Lots of accomplishments since 2020-08-03 launch, e.g.:
 - Free edX courses on how to develop secure software - 2,254 registrants as of Feb 2021
 - CII Best Practices badge - >3600 participating projects, >500 passing badges
 - OSSF Scorecard - simple automated evaluation of OSS project
 - Developed PoC security metric dashboard for OSS projects (building on badge & scorecard)
 - Begun development of curated, community-driven collection of security reviews of OSS
 - “CVE benchmark” - dataset of vulnerabilities & fixes, to better benchmark security tools
- See OpenSSF website <<https://openssf.org>>, esp. “Town Halls” on 2020-11-09 & 2021-02-22



Announcing new OpenSSF members

New members dedicated to helping advance open source security education and best practices.



Report on the 2020 FOSS Contributor Survey



- “Report on the 2020 FOSS Contributor Survey”
 - Collaboration between LF & Laboratory for Innovation Science at Harvard (LISH)
 - Incorporated into OpenSSF working group on securing critical projects
 - Focused on security & sustainability
 - Analyzed survey responses from 1,196 participants (not everyone completed every question)
- Top three motivations for contributors are non-monetary
 - Top motivations: adding needed feature/fix, enjoying learning, and creative/enjoyable work
 - Majority (74.87%) already employed full-time, ~half (51.65%) paid to develop OSS
- OSS security should receive more effort, burden should be beyond contributors
 - Providing bug/security fixes, audits, simplifying adding security tools to CI pipelines, memory safety...
- Enhance trend of corporate support for employees’ contribution to FOSS
 - It’s improved over 10 years, but 17.5% reported unclear policies, 5.6% unaware of policies

See: <https://www.linuxfoundation.org/en/resources/publications/2020-foss-contributor-survey/>

Open source challenges in 2021

1

Security

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Diversity

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Getting
Together in
Person Again

Programs to support diversity in our communities



- Inclusive Naming Initiative
- Software Developer Diversity and Inclusion (SDDI) project
- Expanded Formal Mentorship Program
- LiFT Scholarship program
- Live Online Mentorship Program
- Diversity Scholarships & Travel Funding for Events
- Inclusive Speaker Orientation Course (created with National Center for Women in IT)
- Partnership with Blacks in Technology
- Ally Workshops
- Call for Code Racial Justice Initiative
- And more.....

Inclusive Naming Initiative

Helping projects and companies make consistent, responsible choices to remove harmful language.

Priyanka Sharma

General Manager, Cloud Native Computing Foundation



Creating events that are welcoming to all



- No all-male panels, all-male speaker line-ups or all-male keynote line-ups
- Request speakers to take our Inclusive Speaker Orientation, created in collaboration with the National Center for Women & Information Technology
- Onsite Nursing Rooms
- Free, onsite Child Care
- Onsite prayer rooms, quiet rooms and 'zen zones'
- Attendee Communication Preference Stickers & Pronoun Stickers
- Non-Binary Restrooms
- Gender Neutral Event Shirt Sizing
- Accessibility— captioning on video recordings, wheelchair accessible venues, food allergy management, information on event websites on wheelchair and medical equipment rental
- Non-Alcoholic Beverages available at all social events
- Diversity & Inclusion Handouts with an overview of our onsite offerings and a reminder on our Code of Conduct
- Event Code of Conduct Signage prominently displayed onsite
- Special Events to Promote Diversity + Inclusion (such as the Better Together Diversity Social, Women in Open Source lunch, Speed Mentoring Programs and Kids Coding Workshops)

Open source challenges in 2021

1

Security

2

Diversity

3

**Getting
Together in
Person Again**

Virtual Event Fatigue



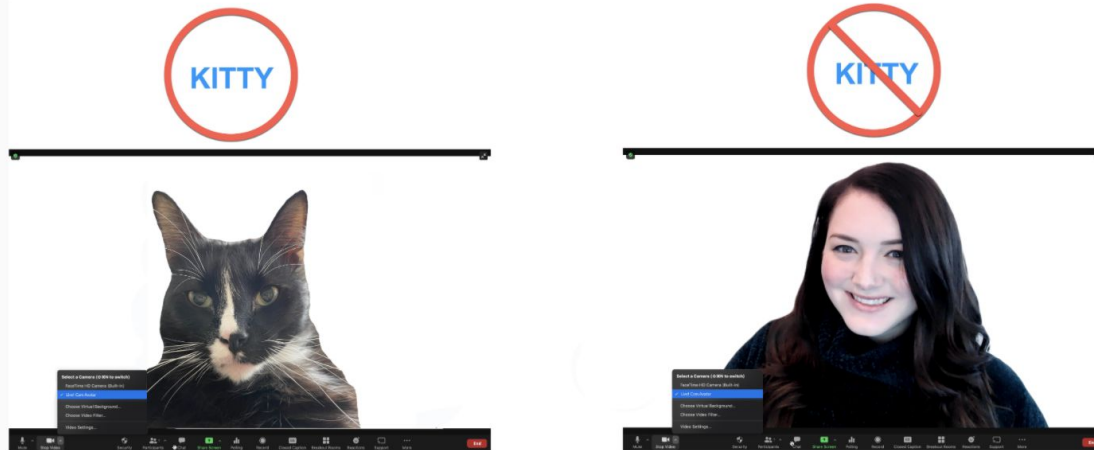
Removing your cat filter

1. While in a Zoom meeting with your video on, click the **Up Arrow** next to the **Stop Video** icon.



2. Select a different camera setting, or try selecting each camera listed until you return to normal. For example, for macOS users, click **FaceTime HD Camera (Built-in)**.

The cat filter will now be removed and you can go back to your purr-fessional meeting.



[Read other great tips on how to use cool Zoom video features.](#)

Call for Code for Racial Justice



- Police & Judicial Reform and Accountability
 - Incident Accuracy Reporting System (IARS)
 - Fair Change
 - Open Sentencing
- Policy & Legislation Reform
 - Truth Loop
 - Five Fifths Voter
 - Legit-Info
- Diverse Representation
 - TakeTwo



Special Guest:

Jo Ann Hill

Open Sentencing Project & IBM

Mobile Native Foundation

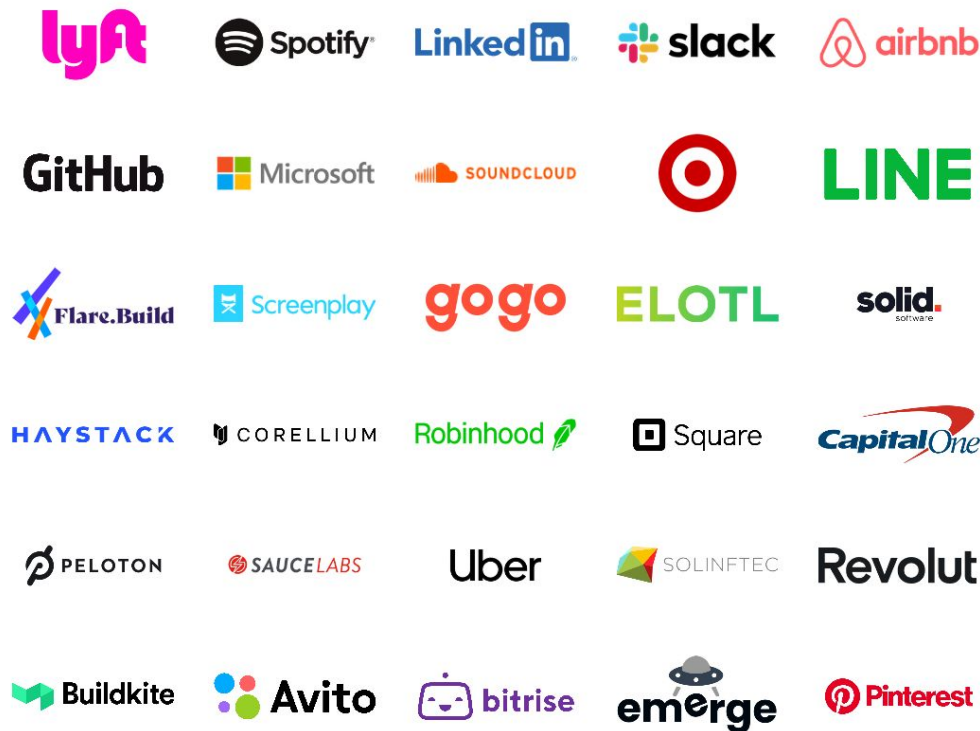


Bringing developers together to improve processes and technologies that support large-scale Android and iOS applications.

Special Guest:

Keith Smiley

Lyft



Servo Project



- Modern and open web engine for building applications and immersive experiences using web technologies.
- Started by Mozilla in 2012 and brought to the Linux Foundation in November 2020 to expand the contributor community



Special Guest:

Alan Jeffrey

Servo Project technical chair

OpenChain ISO 5230 Update



Special Guest:

Shane Coughlan

General Manager

OpenChain Project



Sigstore Announcement



Linux Foundation Announces Free sigstore Signing Service to Confirm Origin and Authenticity of Software

sigstore improves the security of the software supply chain by enabling the easy adoption of cryptographic software signing backed by transparency log technologies.

Special Guest:

Luke Hinds

Red Hat



Founding Members



Red Hat





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