Open Source at Uber

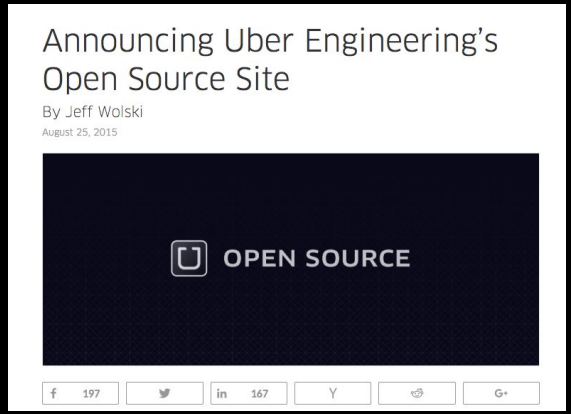
Brian Hsieh, Sr. Open Source Program Manager

Goals of this Presentation

Share Uber's open source program structure and processes.

Open the conversation of how Uber can better engage and participate in the open source community in the future.

beginning of the story

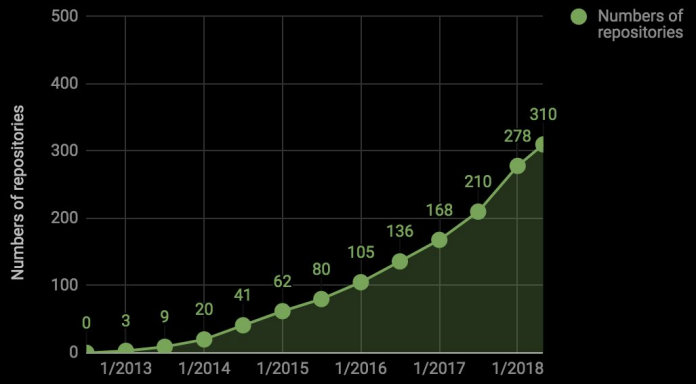


Autonomy. Bottom-up.

https://eng.uber.com/uber-open-source/

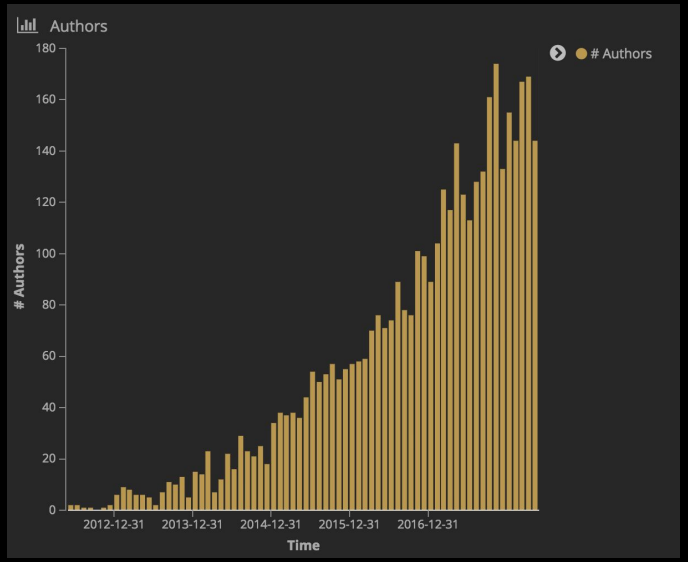
310 repositories on GitHub today

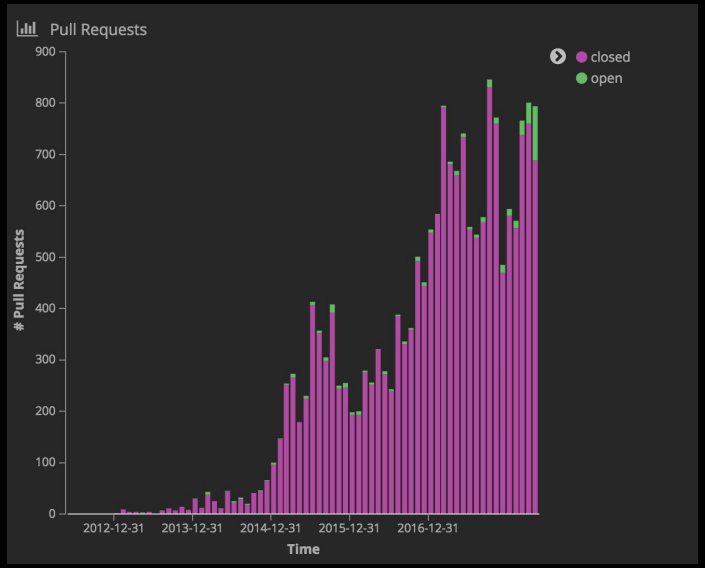
Open source 1 repository/project every week since 11/2012.



the need to form an open source program

first program manager hired in 11/2018

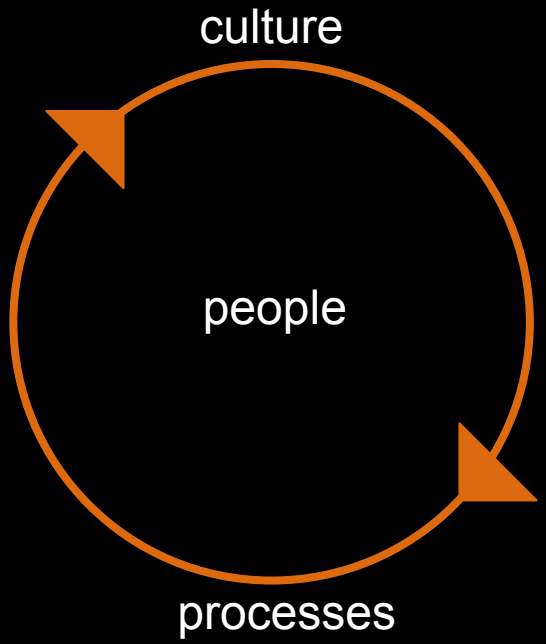

Authors
Authors
180
160
140
120
100
80
60
40
20
0
Authors
2012-12-31
2013-12-31
2014-12-31
2015-12-31
2016-12-31
Time


Pull Requests
closed
open
900
800
700
600
500
400
300
200
100
0
Pull Requests
2012-12-31
2013-12-31
2014-12-31
2015-12-31
2016-12-31
Time

technical
process
oss
developer
communication
strategy
project
advocate
community
culture
license
program
operation
branding

Things to Consider

- Who are the stakeholders?
- What is the strategy and goals? What's the budget?
- Who approves what? What's the policy?
- Do people really know we have a policy?
- How much open source software have we used?
- How much open source software have we created?
- Do we have any checking tools in our SDLC?
- What's the best practice of open sourcing a project?
- Who manages GitHub? Oh, and how many GitHub orgs do we have out there?
- Who is responsible for maintaining these projects?
- What's the recognition mechanism?
- Partners, adoptions... do we know who and when and how?
- Who triages these issues? Should I worry?
- How do we engage with the community?
- ...



processes driven by the culture for the people

the teams at Uber

passionate, vibrant, diverse, energetic culture for innovation

Culture

We value ideas over hierarchy.

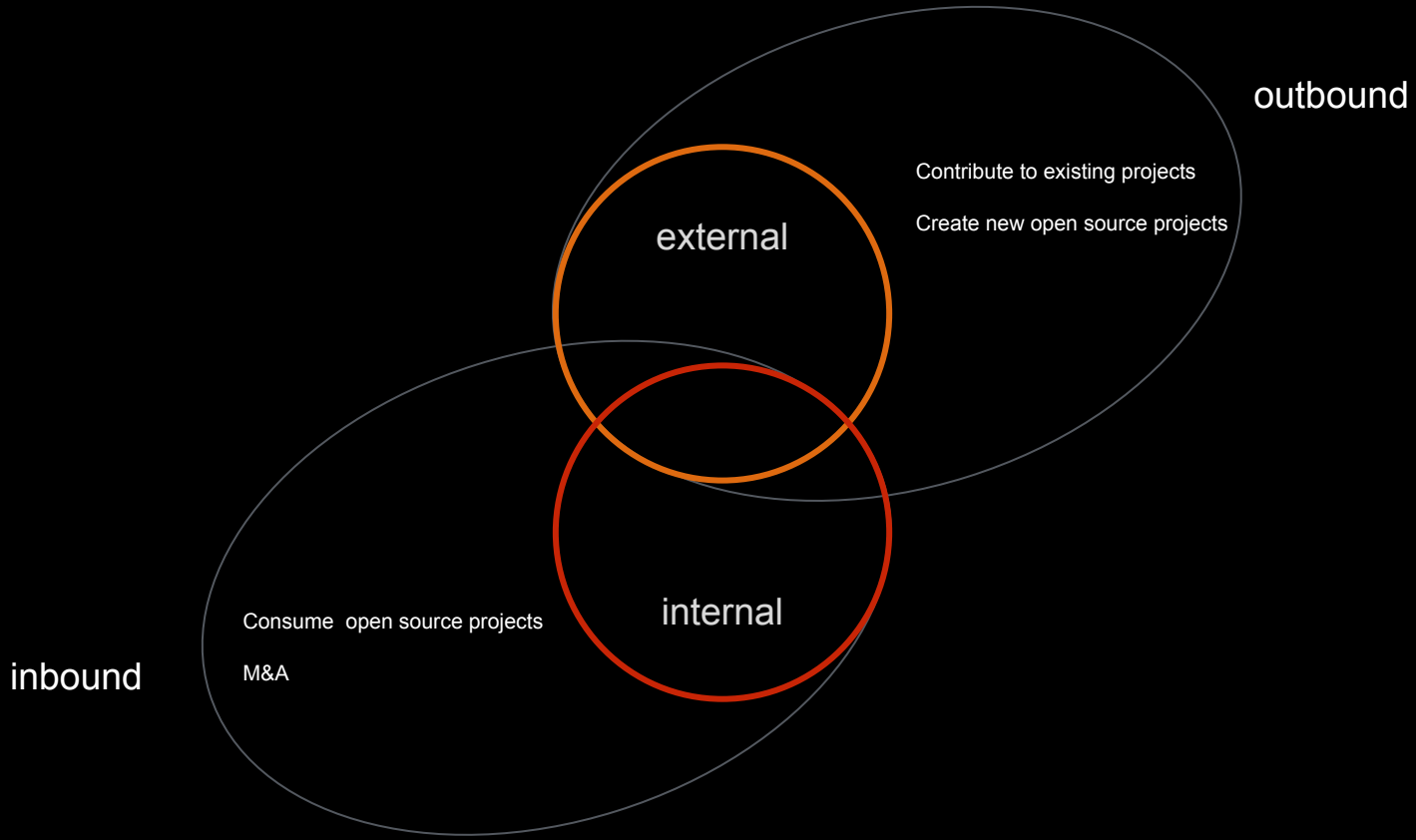
meritocracy. full transparency.

We do the right thing.

a good open source community citizen.

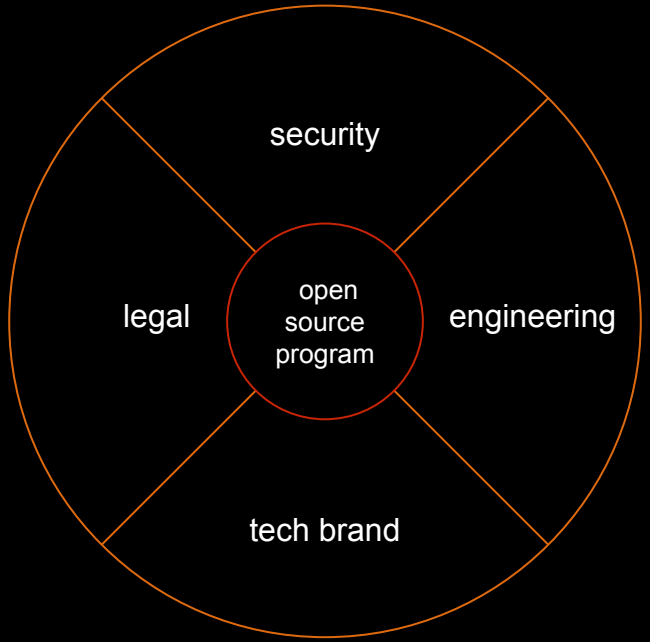
Enabling collaboration for everyone, everywhere.

Mission of Uber's Open Source Program


outbound
Contribute to existing projects
Create new open source projects
external
internal
Consume open source projects
M&A
inbound

Structure

the enablers: culture influencers & enhancers



The Principals

support vs. direct

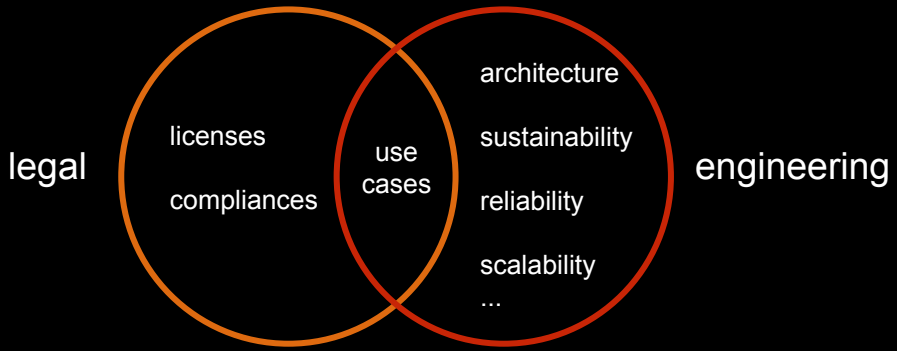
facilitate vs. govern

enable vs. block

adapt vs. enforce

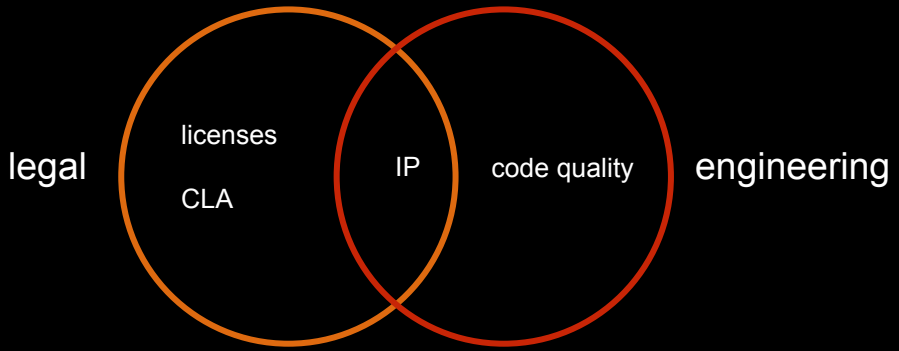
distributed vs. centralized

Consume



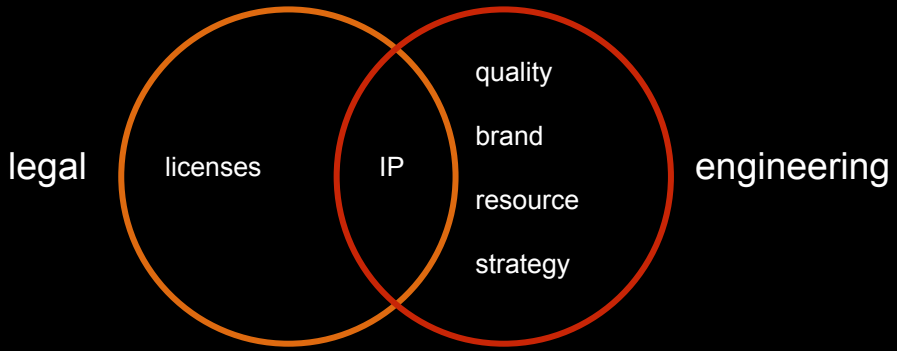
technology selection is driven by the engineering team and the business needs

Contribute



contributing to the community is encouraged

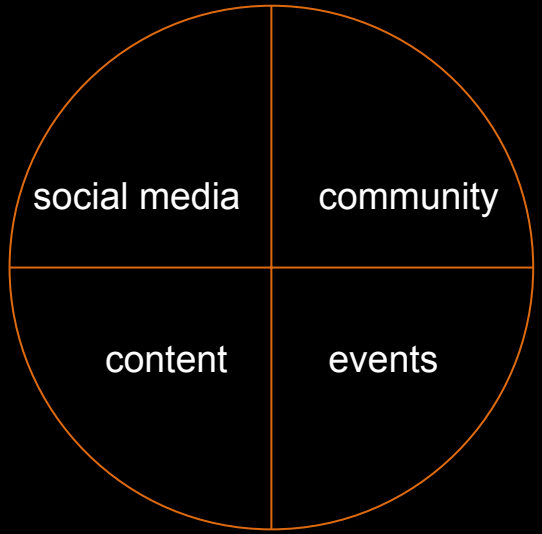
Create

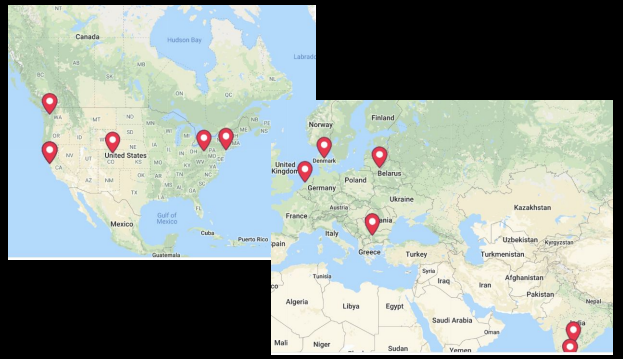


driven by the team and business

Tech Brand

Supporters & Enablers





eng.uber.com
@UberEng

www.meetup.com/pro/uber/

bus factor

documentation, tooling & automation
self-organization

todogroup.org

Everything you need to know to build an open source program office.

some of our projects

machine learning
infrastructure
visualization

Pyro

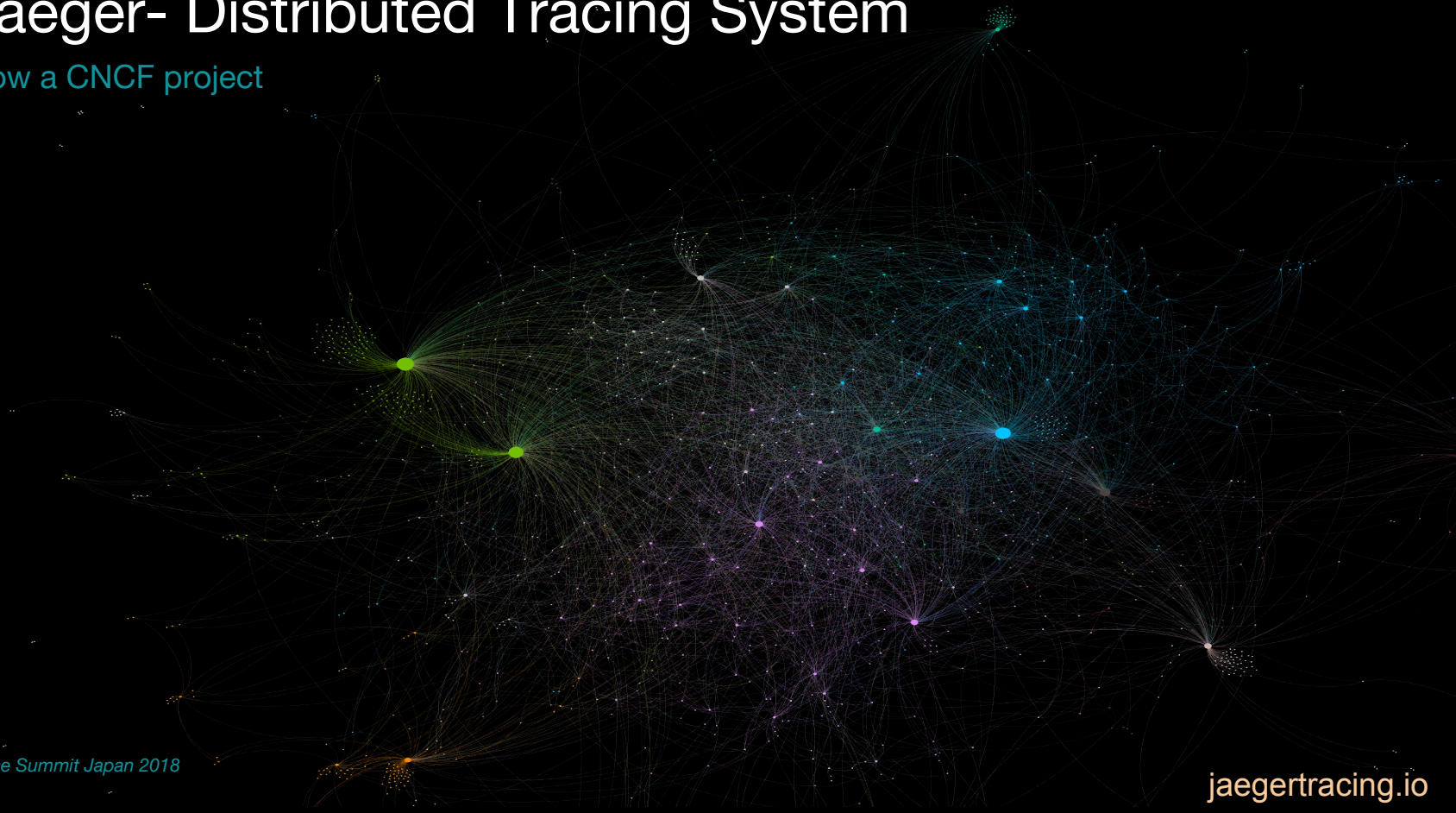
Horovod

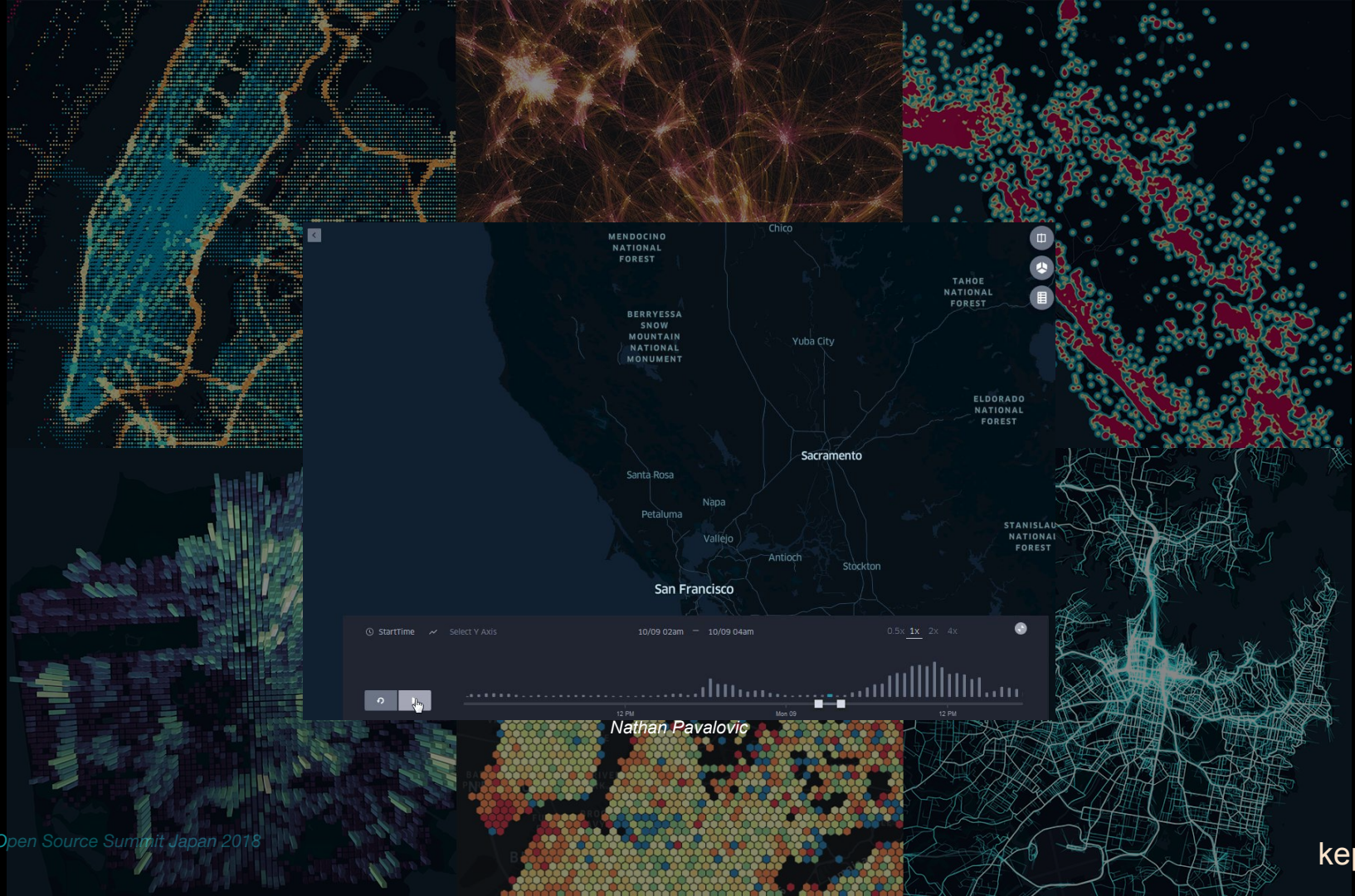
H3: hexagonal geospatial indexing system

http://uber.github.io/h3

Jaeger- Distributed Tracing System

Now a CNCF project

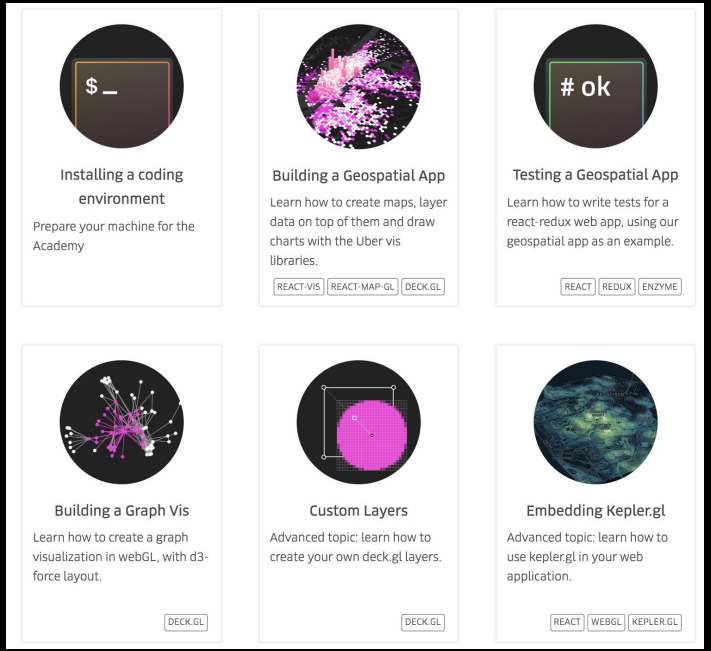




Nathan Pavalovic

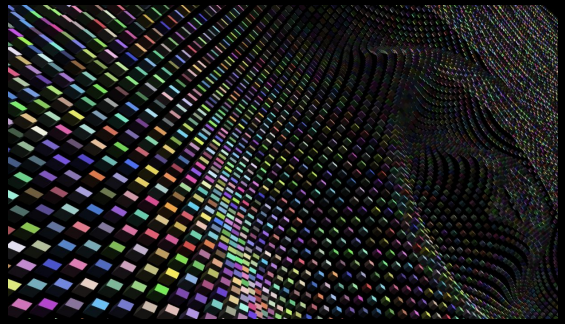
kepler.gl

vis.gl



vis.academy

deck.gl



luma.gl

How Can We Help?

This is our new beginning.

We are learning as we go.

Let us know how we can do better.

@briankhsieh

ospo@uber.com

Thank you

This work is licensed under a Creative Commons Attribution 4.0 International License.