

# Open Source at Uber

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**UBER** Open Source

# 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.

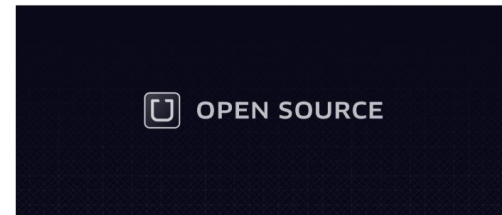


# beginning of the story

## Announcing Uber Engineering's Open Source Site

By Jeff Wolski

August 25, 2015



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Autonomy. Bottom-up.

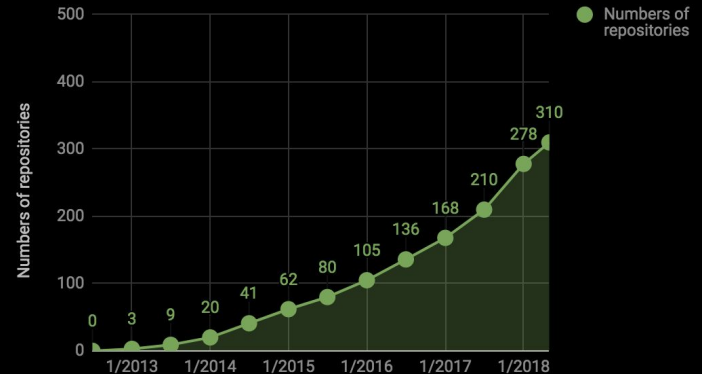


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<https://eng.uber.com/uber-open-source/>

# 310 repositories on GitHub today

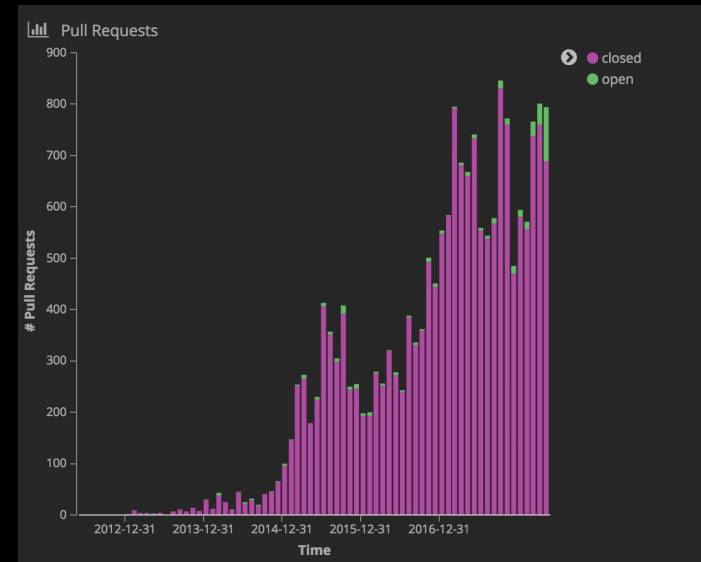
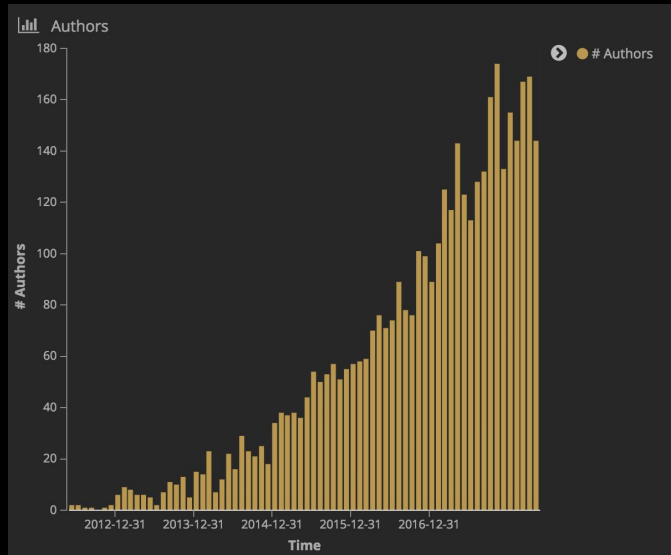
Open source 1 repository/project every week since 11/2012.



# the need to form an open source program

first program manager hired in 11/2018





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

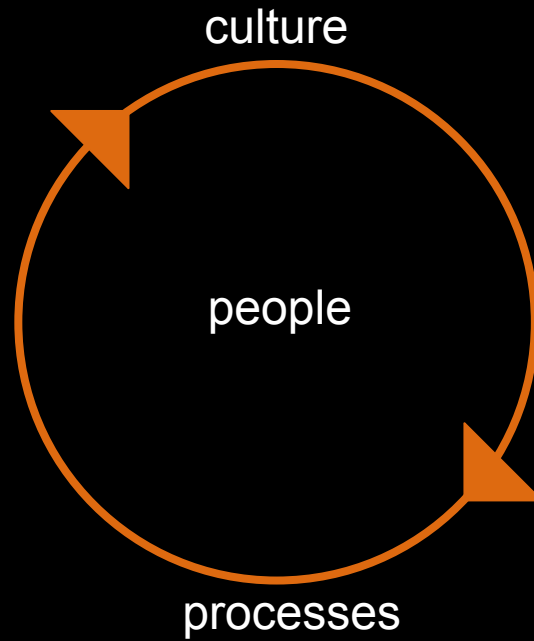


# Things to Consider

- 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

inbound

Consume open source projects  
M&A

external

internal

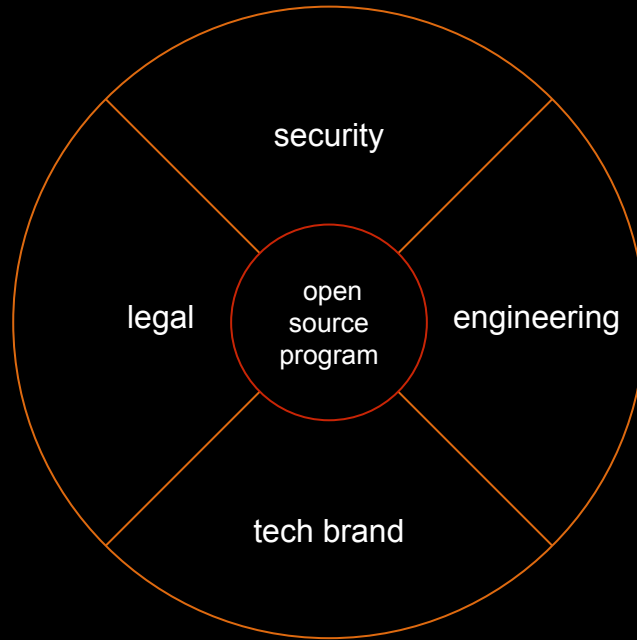
outbound

Contribute to existing projects  
Create new open source projects



# Structure

the enablers: culture influencers & enhancers



# The Principals

support vs. direct

facilitate vs. govern

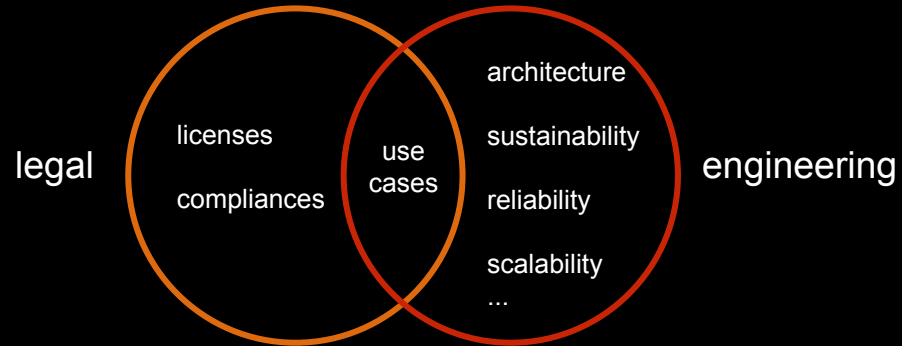
enable vs. block

adapt vs. enforce

distributed vs. centralized



# Consume

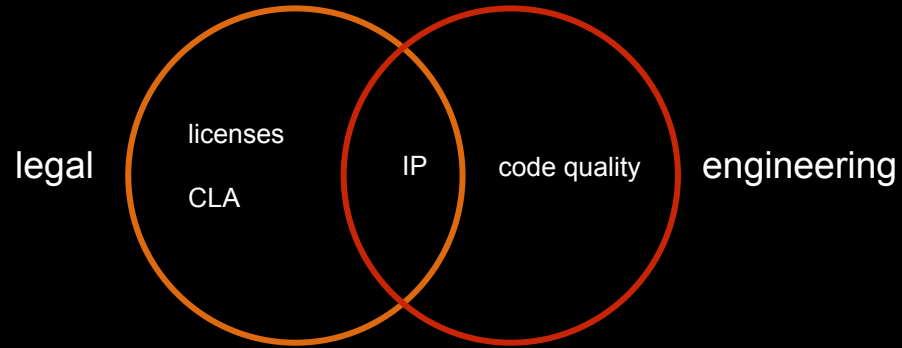


technology selection is driven by the engineering team and the business needs





# Contribute



contributing to the community is encouraged



# Create



driven by the team and business



# Tech Brand

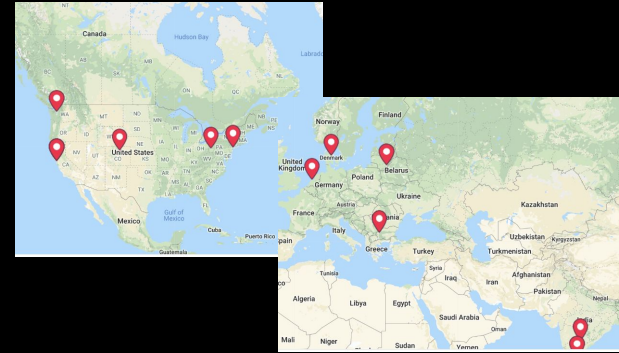
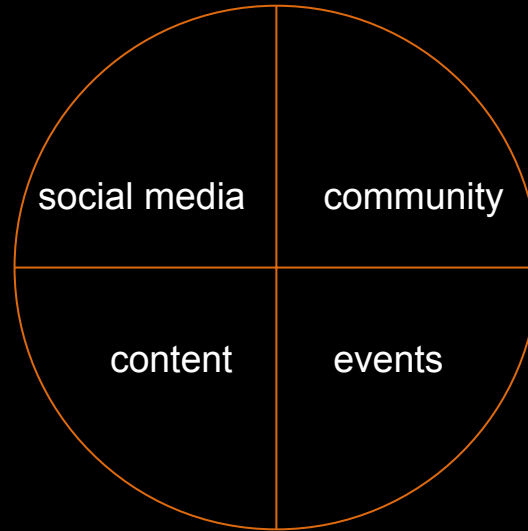
Supporters & Enablers

Open Source  
Latest Articles



What Every Engineer Should Know  
About Open Source Software Licenses  
and IP

*eng.uber.com*  
*@UberEng*



[www.meetup.com/pro/uber/](http://www.meetup.com/pro/uber/)



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# 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





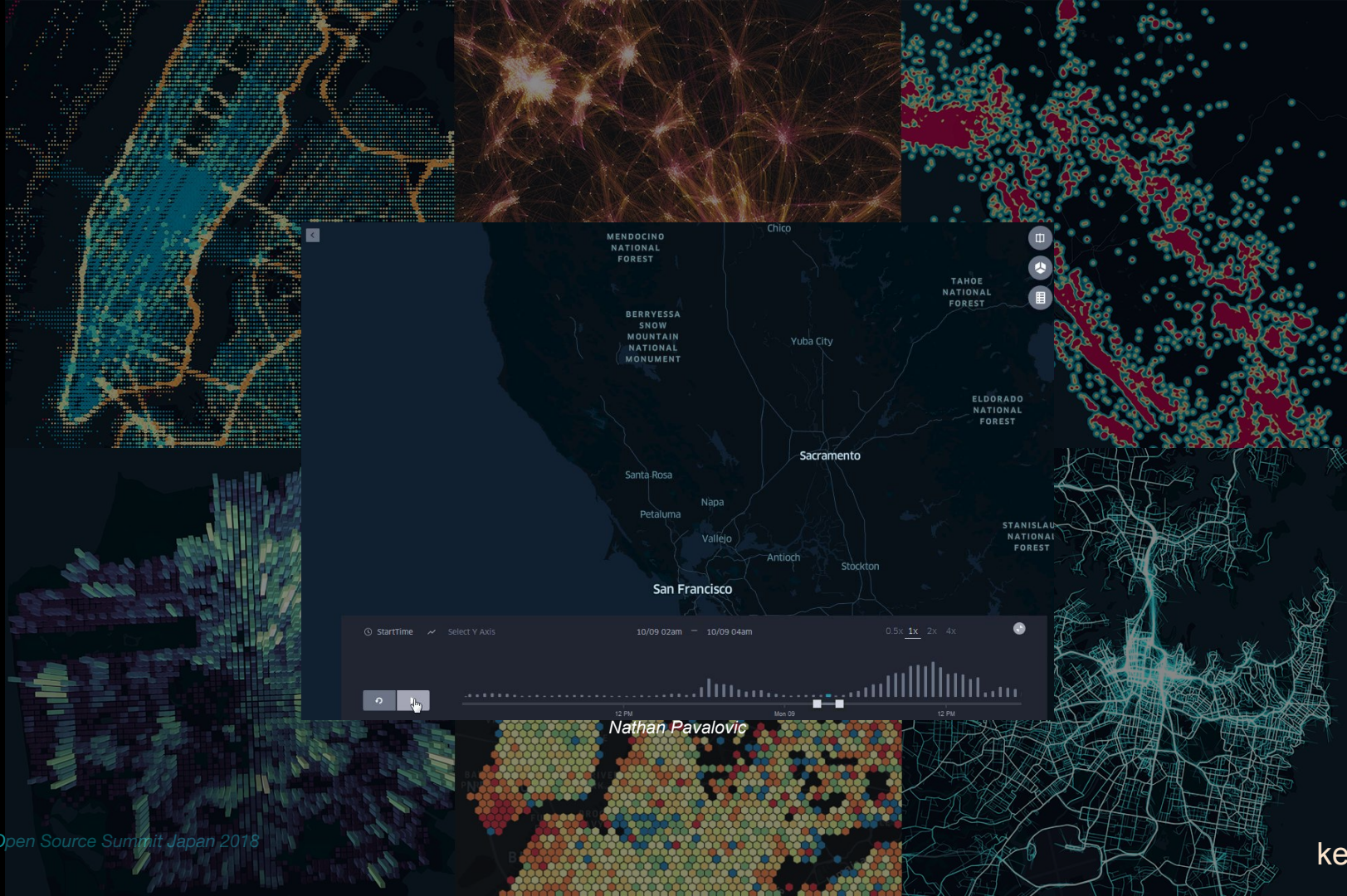
# Jaeger- Distributed Tracing System

Now a CNCF project




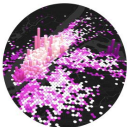
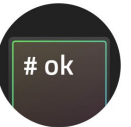

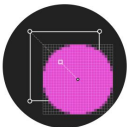

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[jaegertracing.io](https://jaegertracing.io)

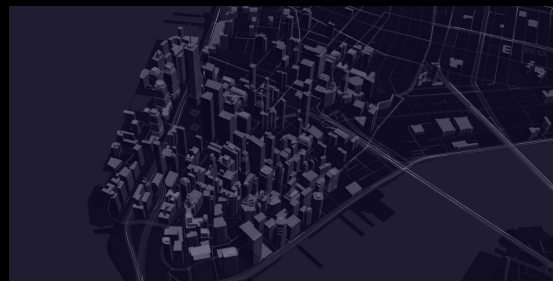




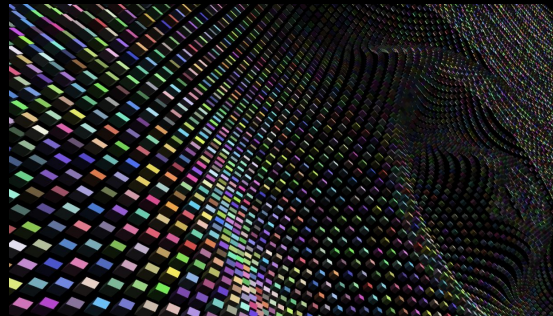
# vis.gl

 <p><b>Installing a coding environment</b> Prepare your machine for the Academy</p> <p>REACT-VIS   REACT-MAP-GL   DECK.GL</p>	 <p><b>Building a Geospatial App</b> Learn how to create maps, layer data on top of them and draw charts with the Uber vis libraries.</p> <p>REACT-VIS   REACT-MAP-GL   DECK.GL</p>	 <p><b>Testing a Geospatial App</b> Learn how to write tests for a react-redux web app, using our geospatial app as an example.</p> <p>REACT   REDUX   ENZYME</p>
 <p><b>Building a Graph Vis</b> Learn how to create a graph visualization in WebGL, with d3-force layout.</p> <p>DECK.GL</p>	 <p><b>Custom Layers</b> Advanced topic: learn how to create your own deck.gl layers.</p> <p>DECK.GL</p>	 <p><b>Embedding Kepler.gl</b> Advanced topic: learn how to use kepler.gl in your web application.</p> <p>REACT   WEBGL   KEPLER.GL</p>

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deck.gl



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# How Can We Help?

This is our new beginning.

We are learning as we go.

Let us know how we can do better.



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Thank you



# UBER



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