



KubeCon



CloudNativeCon



OPEN SOURCE SUMMIT

China 2019

Stitching Things Together

Dan Kohn, CNCF Executive Director
@dankohn1
June 25, 2019



CNCF Hosted Projects





K8S Architecture: More Fast and Bake Things

Bootstrapped with single-donut
mon, k8s, and topol

Built with Openstack: aware
Mux wrapper

Node, Kubelet, Kube-apiserver, Kube-controller-manager, Kube-scheduler, Kube-proxy

SUPPORTING THE CLOUD NATIVE ECOSYSTEM
www.cncf.io | @CloudNativeFDN

ORCHESTRATION.
CONTAINERIZATION.
MICROSERVICES.



CLOUD
NATIVE
CON
Europe 2017



KubeCon
A CNCF EVENT

ORCHESTRATION.
CONTAINERIZATION.
MICROSERVICES.

CNCF Cloud Native Definition v1.0

Cloud native technologies empower organizations to build and run scalable applications in modern, dynamic environments such as public, private, and hybrid clouds. Containers, service meshes, microservices, immutable infrastructure, and declarative APIs exemplify this approach.

These techniques enable loosely coupled systems that are resilient, manageable, and observable. Combined with robust automation, they allow engineers to make high-impact changes frequently and predictably with minimal toil.

The Cloud Native Computing Foundation seeks to drive adoption of this paradigm by fostering and sustaining an ecosystem of open source, vendor-neutral projects. We democratize state-of-the-art patterns to make these innovations accessible for everyone.

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Not found



Kubernetes



why



kubernetes?



2004





COLUMBIA UNIVERSITY

THE POWER OF KNOWLEDGE



E-MAIL

PASSWORD

LOGIN

SIGNUP

LOST PASSWORD ?



JUMP

GO

MAIN MENU

MY ACCOUNT

- tesstphotographs
- tesstwriting
- tesstnews

FEATURED EXHIBITION

Exhibition Name



★★★★★

LATEST EXHIBITIONS



View All Exhibitions

Next 6 »

LATEST USERS

\$adam

Adam Goldberg: 22F
Area of Interest

LATEST JOURNALS

@test

by adam

this is a multiline testing!
\$str; }

@test

by adam

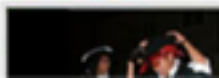
This Is a Multiline Testing
@ Complete Journal
Entry

by adam

This is a complete journal
entry.

@test

LATEST FAVORITES





[thefacebook]

[home](#) [search](#) [global](#) [social net](#) [invite](#) [faq](#) [logout](#)

Brian Moore's Profile

Puget Sound

quick search

[My Profile \[edit \]](#)

[My Friends](#)

[My Groups](#)

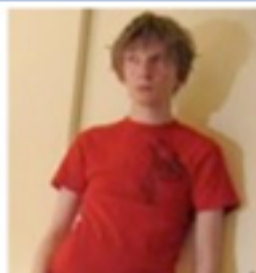
[My Parties](#)

[My Messages](#)

[My Account](#)

[My Privacy](#)

Picture



[Send Brian a Message](#)

[Poke Him!](#)

Connection

You are in a relationship with Brian.

Mutual Friends

You have [19 friends](#) in common with Brian.

Information

Account Info:

Name: Brian Moore

Member Since: May 21, 2005

Last Update: July 19, 2005

Basic Info:

School: [Puget Sound '09](#)

Status: Student

Sex: [Male](#)

Residence: [Todd 311](#)

Birthday: [09/02/1986](#)

Home Town: [Shorewood, WI 53211](#)

High School: [Shorewood HI '05](#)

Contact Info:

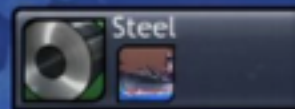
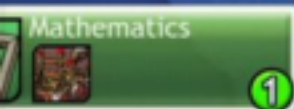
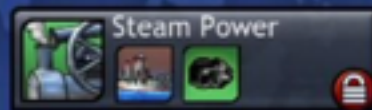
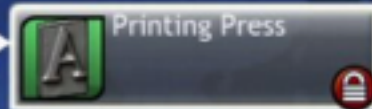
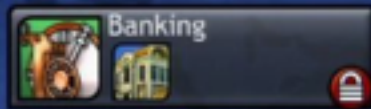
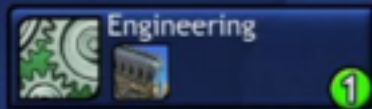
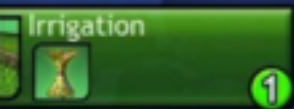
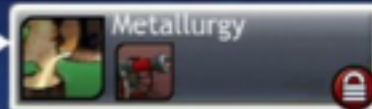
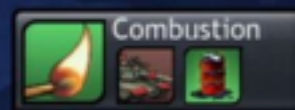
Email: [bmoore@ups.edu](#)


Screename: [DoctaBu](#)

Mobile: [414.702.7426](#)

Summer
Jewish
Adventure
New York City






 Change Selection

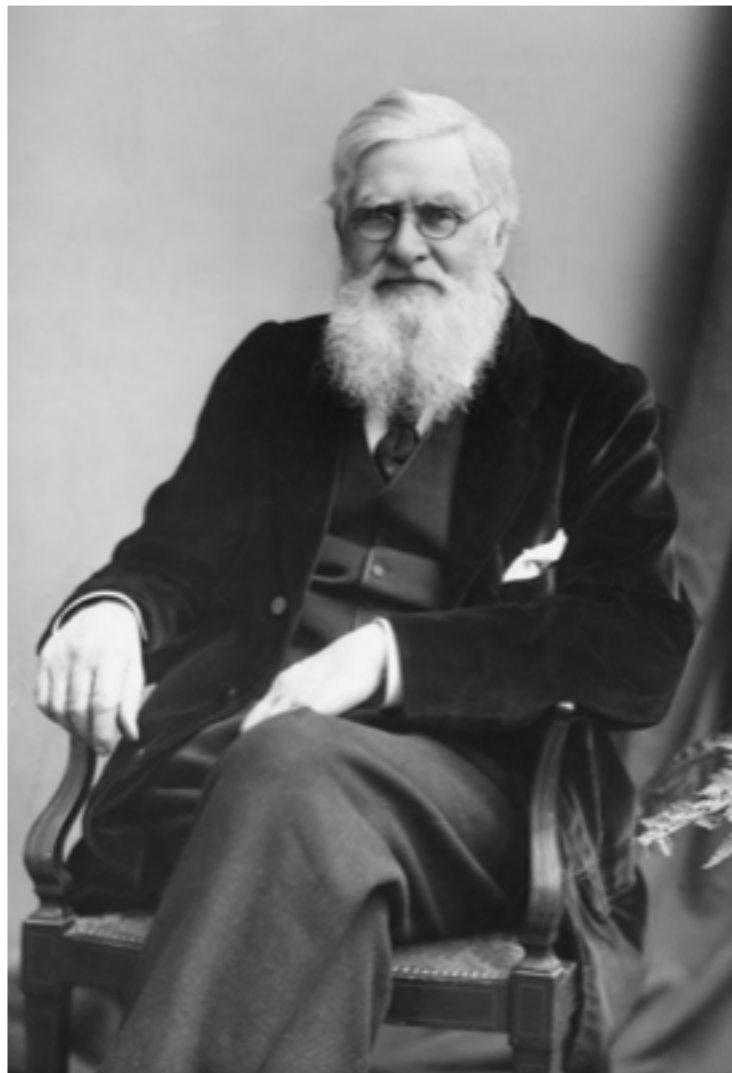
 Civlopedia

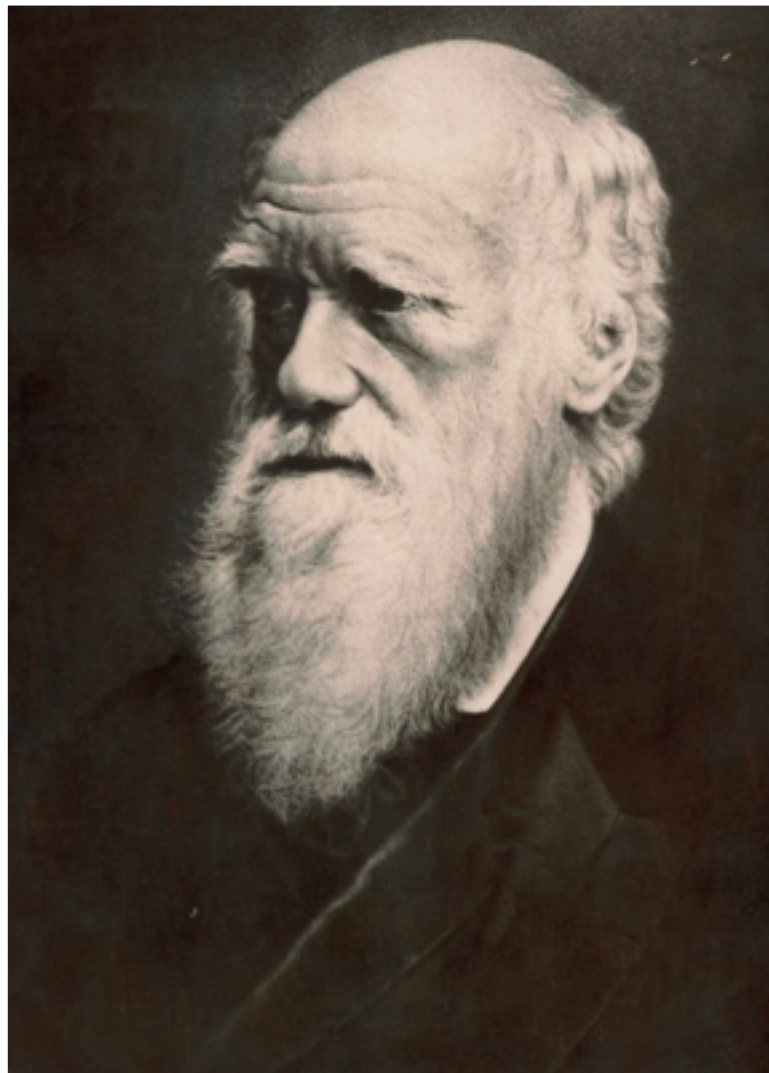
 Look Around

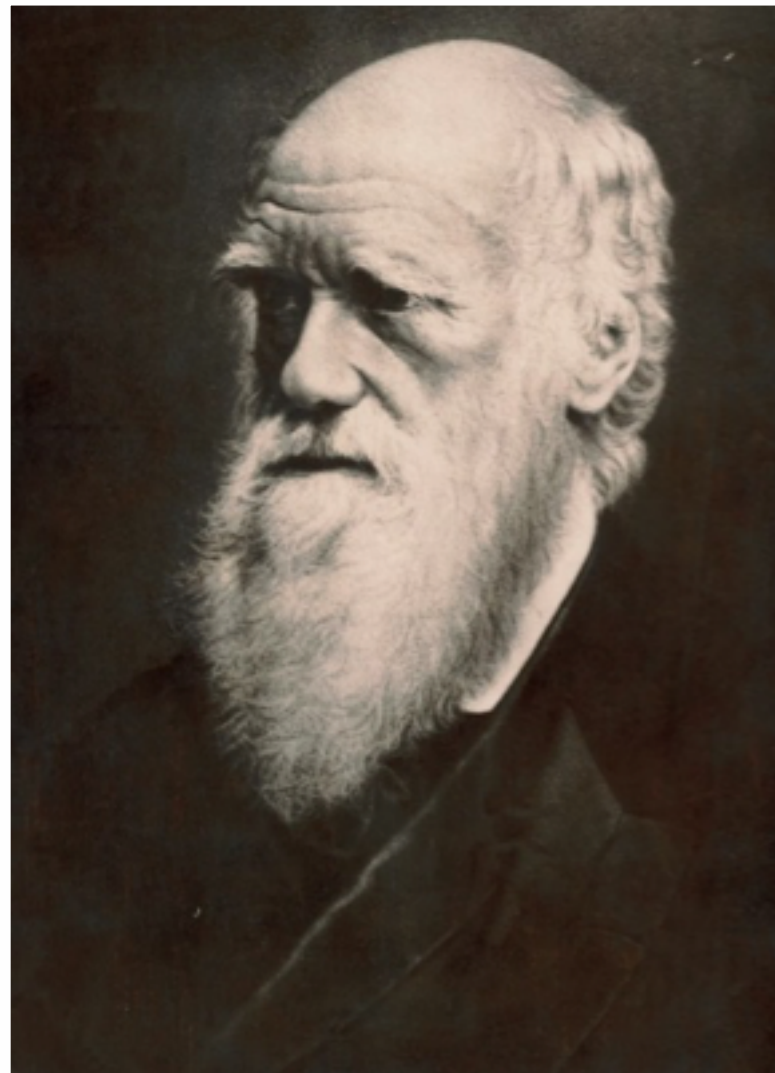
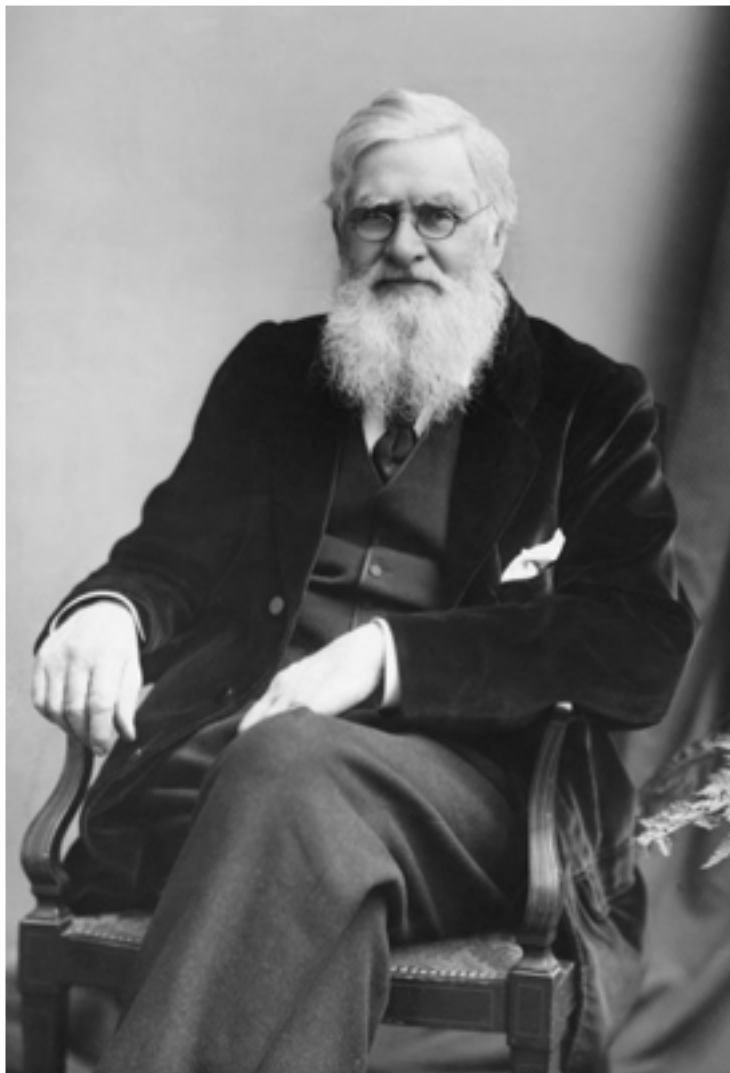
 Exit

Simultaneous Invention

1858







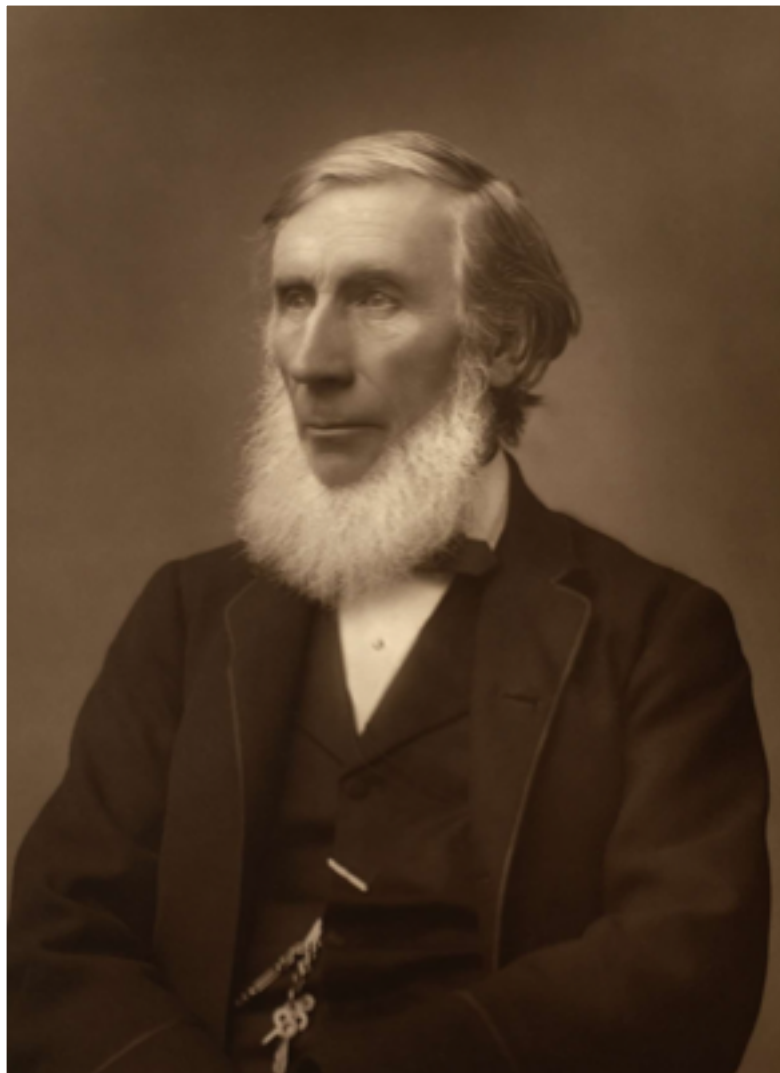
“[T]his principle is exactly like that of the centrifugal governor of the steam engine, which checks and corrects any irregularities almost before they become evident; and in like manner no unbalanced deficiency in the animal kingdom can ever reach any conspicuous magnitude”

- Alfred Russel Wallace, 1858

1687



1856



CIRCUMSTANCES

Affecting the Heat of the Sun's Rays.

BY MRS. EUNICE FOOTE.

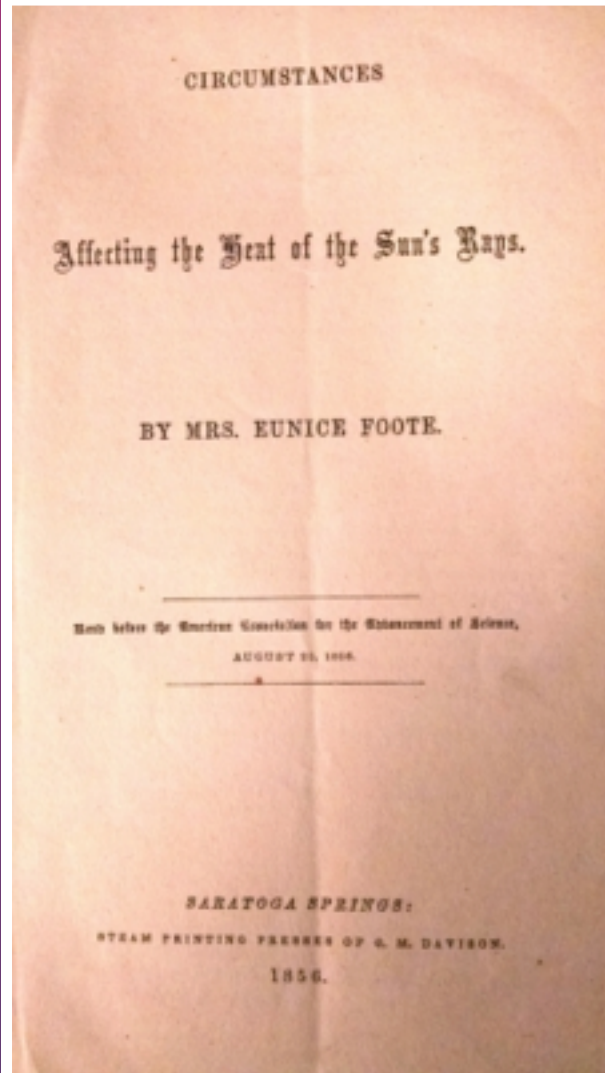
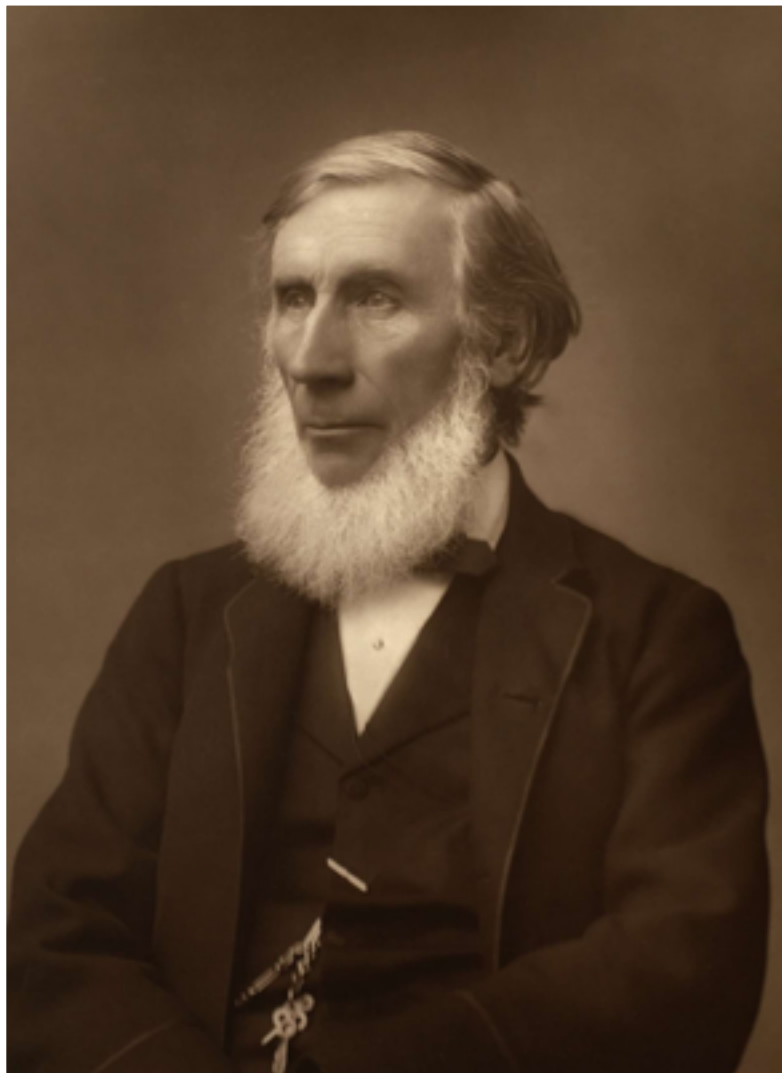
Read before the American Association for the Advancement of Science,

AUGUST 25, 1856.

SARATOGA SPRINGS:

STEAM PRINTING PRESS OF C. M. DAVISON.

1856.



Simultaneous Invention

2010s

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Alibaba Sigma

阿里巴巴



Alibaba.comTM

Amazon Apollo



Apache Mesos



Apache

MESOSTM

Baidu Matrix

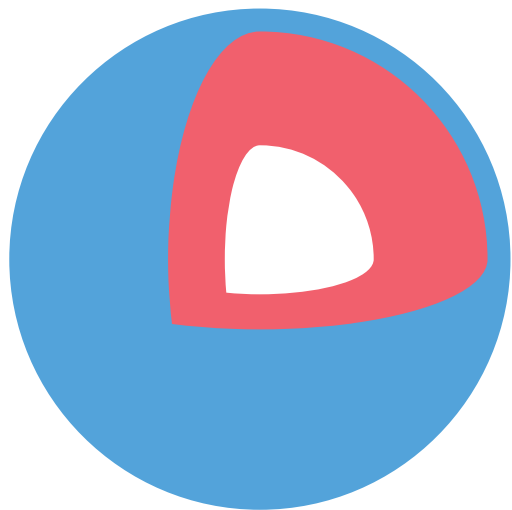


Cloud Foundry Garden & Diego



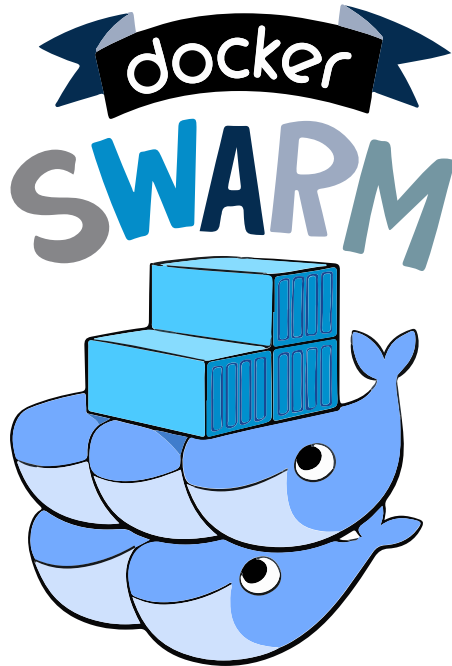
CLOUD **FOUNDRY**

CoreOS Fleet



Core OS

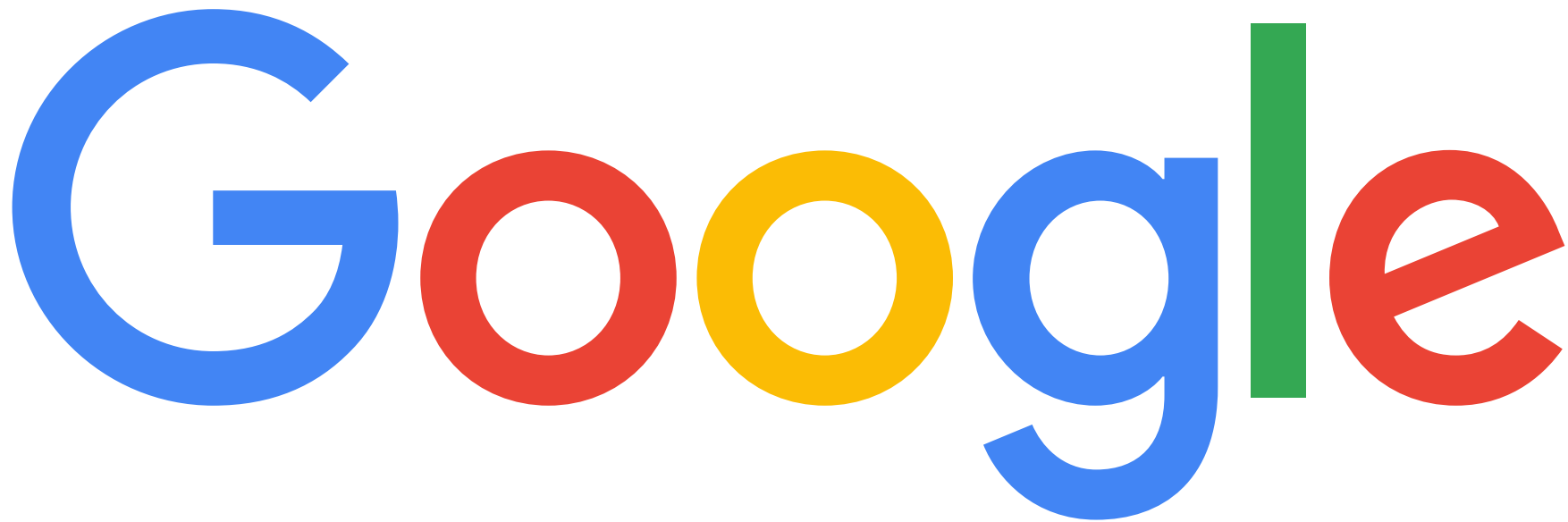
Docker Swarm



Facebook Tupperware



Google Borg & Omega

The image shows the Google logo in its characteristic multi-colored font. The letters are 'G' (blue), 'o' (red), 'o' (yellow), 'g' (blue), 'l' (green), and 'e' (red). A solid green vertical bar is positioned to the right of the 'l' and to the left of the 'e', partially obscuring them. The logo is centered on a white background, which is flanked by purple gradient bars at the top and bottom.

HashiCorp Nomad



HashiCorp

Nomad

IBM Platform Symphony



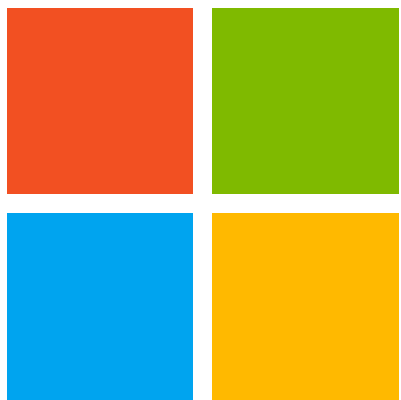
Joyent Triton



Lyft v3 Infra



Microsoft Service Fabric

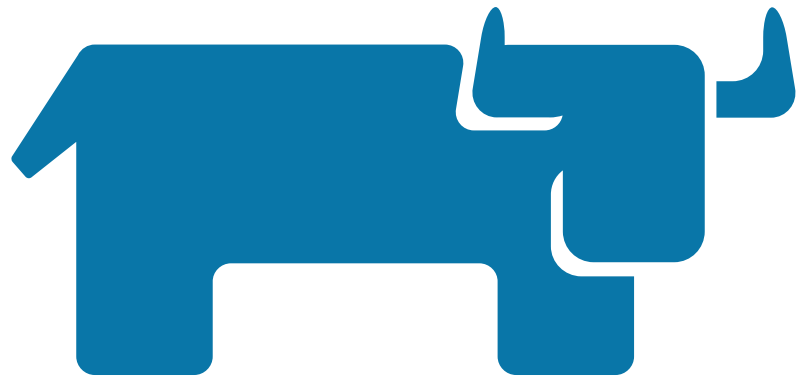


Microsoft

Netflix Titus

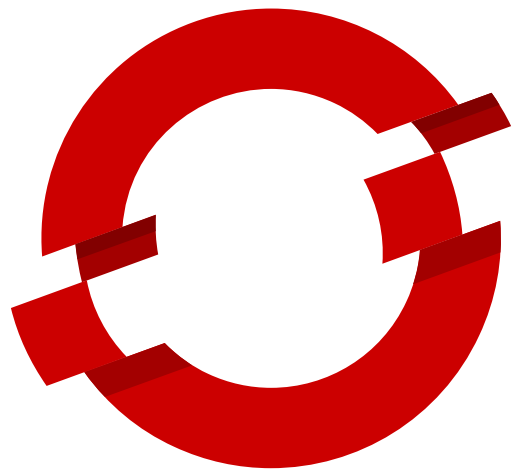
NETFLIX

Rancher Cattle



RANCHER[®]

Red Hat OpenShift v2 Broker



RED HAT[®]
OPENSIFT

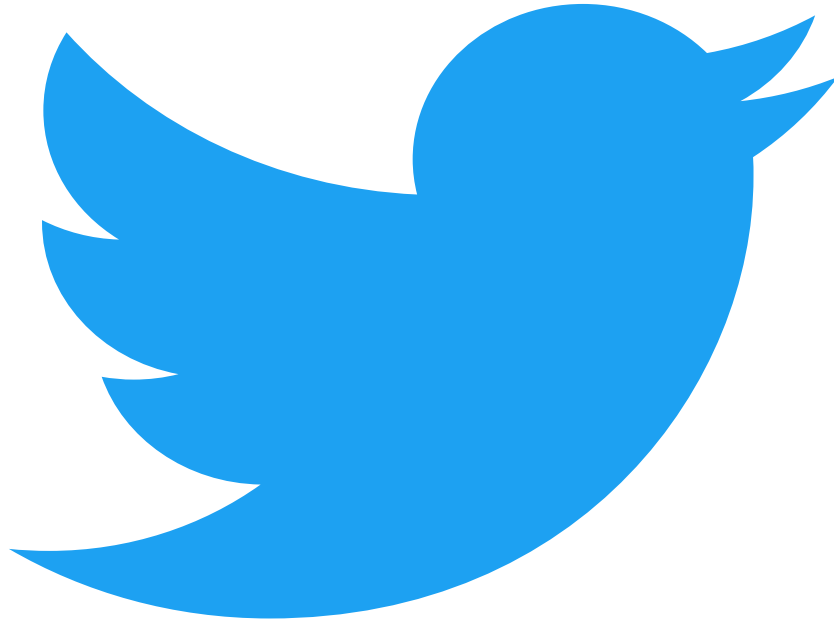
Spotify Helios



Tencent Gaia

Tencent 腾讯

Twitter Aurora



Uber Peloton

Uber

In the Air



**“If I have seen further it is by
standing on the shoulders
of giants”**

- Isaac Newton

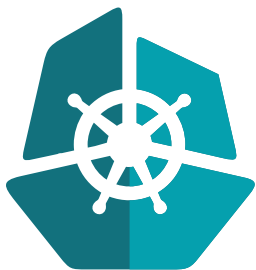
“Bernard of Chartres used to say that we are like dwarfs on the shoulders of giants...”

- John of Salisbury



Everything is a Remix

2019



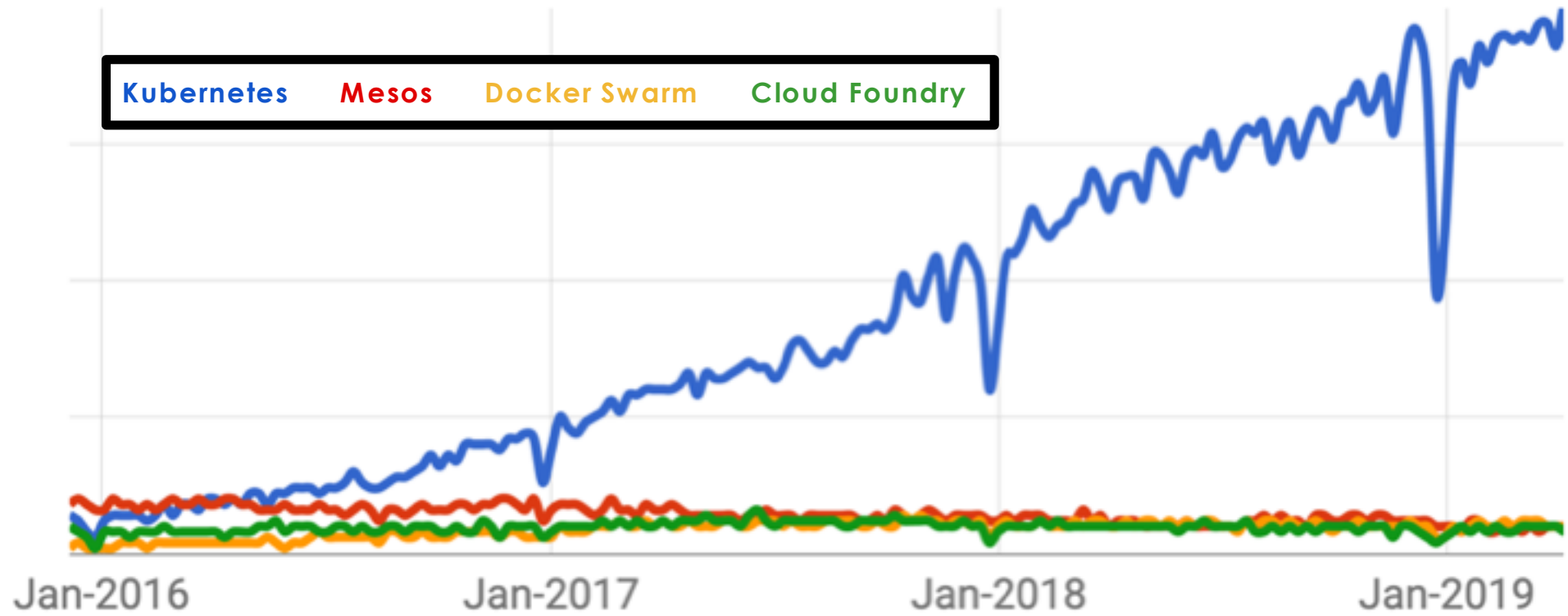
KubeCon



CloudNativeCon

A large stylized 'S' logo composed of teal and blue segments, followed by the text **OPEN SOURCE SUMMIT** in teal and blue capital letters.

China 2019



why



kubernetes?

1

It Works Really Well

②

Vendor-Neutral Open Source

certified



kubernetes

3 It's the People



SOYLENT GREEN IS PEOPLE!



① It Works Really Well

② Vendor-Neutral Open Source

③ It's the People



David Roberts ✓

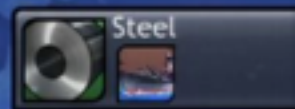
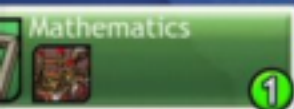
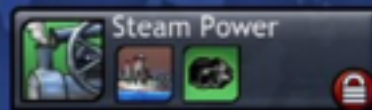
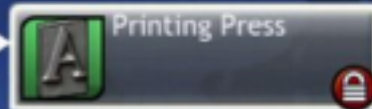
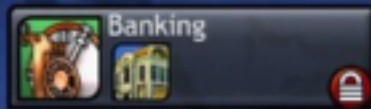
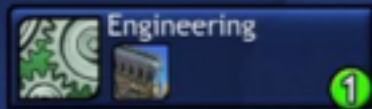
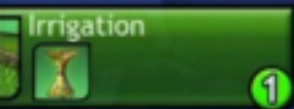
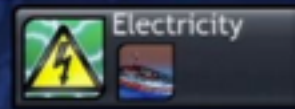
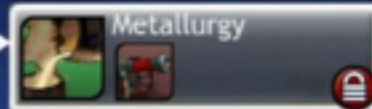
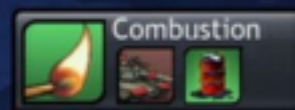
@drvox


Following




Whereas, stitching things together, building up institutions that work, finding policy mechanisms that improve lives without unanticipated side effects, figuring out how to keep diverse interests on the same page -- that stuff is difficult, emotionally & intellectually.


2:32 PM - 1 Feb 2019



 Change Selection

 Civlopedia

 Look Around

 Exit



**“The way of progress was
neither swift nor easy”**

- Marie Curie





**PEOPLE
MEN AND
WOMEN
AT WORK**



KubeCon



CloudNativeCon



OPEN SOURCE SUMMIT

China 2019

Thank You

@dankohn1



Endnotes

- Slate: [The Other Social Network](#) by Christopher Beam
- [Technology Trees](#) by Tuur Ghys
- Quartz: [Simultaneous Invention](#)
- [The Myth of the Sole Invention](#) by Mark Lemley
- New Yorker: [In the Air](#) by Malcolm Gladwell
- Smithsonian.com: [This Lady Scientist Defined the Greenhouse Effect](#) by Leila McNeil
- ACM Queue: [Bora, Omega, and Kubernetes](#)
- [Everything is a Remix](#), Episode 2
- [Shanghai Tower](#)
- David Roberts [tweet](#)