KubeCon CloudNativeCon
OPEN SOURCE SUMMIT
China 2019

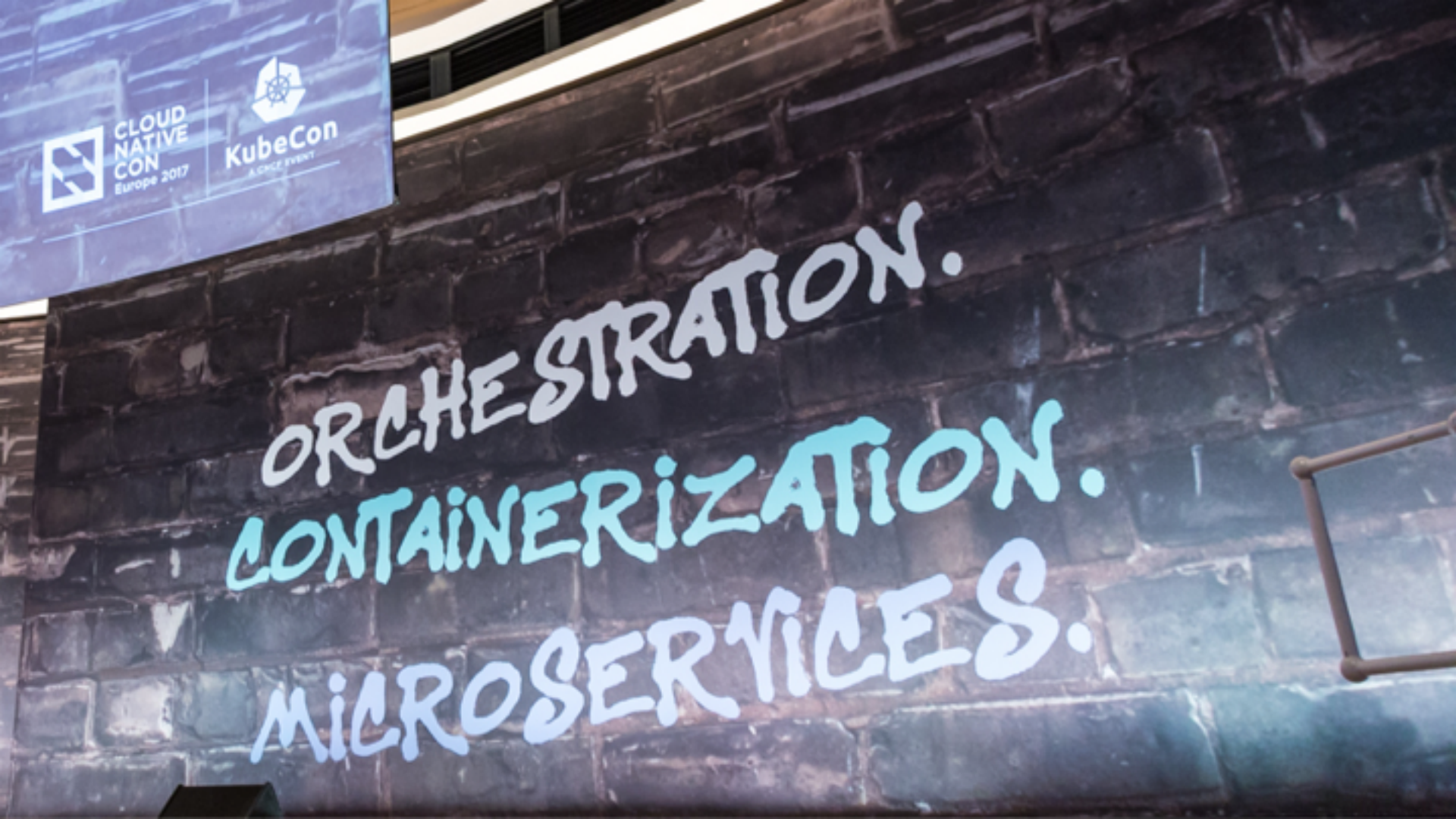
巧妙地融合与借鉴

Dan Kohn，CNCF 执行董事
@ dankohn1
2019 年 6 月 25 日

CNCF 托管项目

kubernetes
Prometheus
envoy
OPENTRACING
gRPC
rkt
CNI
JAEGER
TUF
Notary
Vitess
CoreDNS
fluentd
NATS
LINKERD
HELM
ROOK
HARBOR
etcd
Open Policy Agent
cri-o

gRPC
SUPPORTING THE CLOUD NATIVE ECOSYSTEM
www.cncf.io | @CloudNativeFdn
ORCHESTRATION.
CONTAINERIZATION.
MICROSERVICES.


CLOUD NATIVE CON Europe 2017
KubeCon
ORCHESTRATION.
CONTAINERIZATION.
MICROSERVICES.

CNCF 云原生定义 v1.0

云原生技术有利于各组织在公有云、私有云和混合云等新型动态环境中，构建和运行可弹性扩展的应用。云原生的代表技术包括容器、服务网格、微服务、不可变基础设施和声明式 API。

这些技术能够构建容错性好、易于管理和便于观察的松耦合系统。结合可靠的自动化手段，云原生技术使工程师能够轻松地对系统作出频繁和可预测的重大变更。

云原生计算基金会 (CNCF) 致力于培育和维护一个厂商中立的开源生态系统，来推广云原生技术。我们通过将最前沿的模式民主化，让这些创新为大众所用。

CNCF 云原生定义 v1.0

云原生技术有利于各组织在公有云、私有云和混合云等新型动态环境中，构建和运行可弹性扩展的应用。云原生的代表技术包括容器、服务网格、微服务、不可变基础设施和声明式 API。

这些技术能够构建容错性好、易于管理和便于观察的松耦合系统。结合可靠的自动化手段，云原生技术使工程师能够轻松地对系统作出频繁和可预测的重大变更。

云原生计算基金会 (CNCF) 致力于培育和维护一个厂商中立的开源生态系统，来推广云原生技术。我们通过将最前沿的模式民主化，让这些创新为大众所用。

CNCF 云原生定义 v1.0

云原生技术有利于各组织在公有云、私有云和混合云等新型动态环境中，构建和运行可弹性扩展的应用。云原生的代表技术包括容器、服务网格、微服务、不可变基础设施和声明式 API。

这些技术能够构建**容错性好**、易于管理和便于观察的松耦合系统。结合可靠的自动化手段，云原生技术使工程师能够轻松地对系统作出频繁和可预测的重大变更。

云原生计算基金会 (CNCF) 致力于培育和维护一个厂商中立的开源生态系统，来推广云原生技术。我们通过将最前沿的模式民主化，让这些创新为大众所用。

CNCF 云原生定义 v1.0

云原生技术有利于各组织在公有云、私有云和混合云等新型动态环境中，构建和运行可弹性扩展的应用。云原生的代表技术包括容器、服务网格、微服务、不可变基础设施和声明式 API。

这些技术能够构建容错性好、易于管理和便于观察的松耦合系统。结合可靠的自动化手段，云原生技术使工程师能够轻松地对系统作出频繁和可预测的重大变更。

云原生计算基金会 (CNCF) 致力于培育和维护一个厂商中立的开源生态系统，来推广云原生技术。我们通过将最前沿的模式民主化，让这些创新为大众所用。

CNCF 云原生定义 v1.0

云原生技术有利于各组织在公有云、私有云和混合云等新型动态环境中，构建和运行可弹性扩展的应用。云原生的代表技术包括容器、服务网格、微服务、不可变基础设施和声明式 API。

这些技术能够构建容错性好、易于管理和便于观察的松耦合系统。结合可靠的自动化手段，云原生技术使工程师能够轻松地对系统作出频繁和可预测的重大变更。

云原生计算基金会 (CNCF) 致力于培育和维护一个**厂商中立的开源生态系统**，来推广云原生技术。我们通过将最前沿的模式民主化，让这些创新为大众所用。

CNCF 云原生定义 v1.0

云原生技术有利于各组织在公有云、私有云和混合云等新型动态环境中，构建和运行可弹性扩展的应用。云原生的代表技术包括容器、服务网格、微服务、不可变基础设施和声明式 API。

这些技术能够构建容错性好、易于管理和便于观察的松耦合系统。结合可靠的自动化手段，云原生技术使工程师能够轻松地对系统作出频繁和可预测的重大变更。

云原生计算基金会 (CNCF) 致力于培育和维护一个厂商中立的开源生态系统，来推广云原生技术。我们通过将最前沿的模式民主化，让这些创新为大众所用。

Not found Kubernetes

why

kubernetes?

2004

CAMPUSNETWORK™

MAIN | BROWSE | SEARCH | SIGNUP

--View Collection--

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 FAVORITES

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

[thefacebook]

home search global social net invite faq logout

quick search go

My Profile [edit]
My Friends
My Groups
My Parties
My Messages
My Account
My Privacy

Brian Moore's Profile

Puget Sound

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
Screenname:	DoctaBu
Mobile:	414.702.7426

CAMPUSNETWORK - Microsoft Internet Explorer
CAMPUSNETWORK
COLUMBIA UNIVERSITY
THE POWER OF KNOWLEDGE
MAIN MENU
MY ACCOUNT
LATEST EXHIBITIONS
LATEST USERS
LATEST JOURNALS
LATEST FAVORITES
FEATURED EXHIBITION
FEATURED PAGES
FEATURED MEMBERS
LATEST COMMENTS
View All Exhibitions
View All Favorites
HISTORY

[thefacebook]
home search global social net invite faq logout
quick search go
My Profile [edit]
My Friends
My Groups
My Parties
My Messages
My Account
My Privacy
Summer Jewish Adventure
New York City
Brian Moore's Profile
Puget Sound
Picture
Send Brian a Message
Poke Him!
Connection
You are in a relationship with Brian.
Mutual Friends
Access
Brian is currently logged in from a non-residential location.
Friends at Puget Sound
Kerala Hise
Jennifer McFadden
Amy Graeber
Sarah Spurlock
Vu Tran
Briana Skins
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
Screenname: Doctabu
Mobile: 414.702.7426
Websites: http://www.doctabu.com
http://www.livejournal.com/users/doctabu
http://www.flickr.com/photos/doctabu
Personal Info:
Looking For: Friendship
Interested In: Women
Relationship Status: In a Relationship with Rachel Buethe (Tiny Tykes Day Care)
Political Views: Very Liberal
Interests: Film, Graphic Design, Video Editing, Computers, Bowling, Dancing, Acting, Singing, Listening to Decent Music, Sleeping, Being Crazy
Favorite Music: Beck, The Beatles, They Might Be Giants, Phoenix, Paul Simon, OutKast, Avenue Q, Radiohead, Red Hot Chili Peppers, Steely Dan, Styx, U2, Zero 7
Favorite Movies: Office Space, Garden State, Eternal Sunshine of the Spotless Mind, Triplets of Belleville, Amelee
About Me: What is there to say? I dunno. I'm a wild 5'10" skinny-ass that wants to be creative. I like making movies and stuff like that

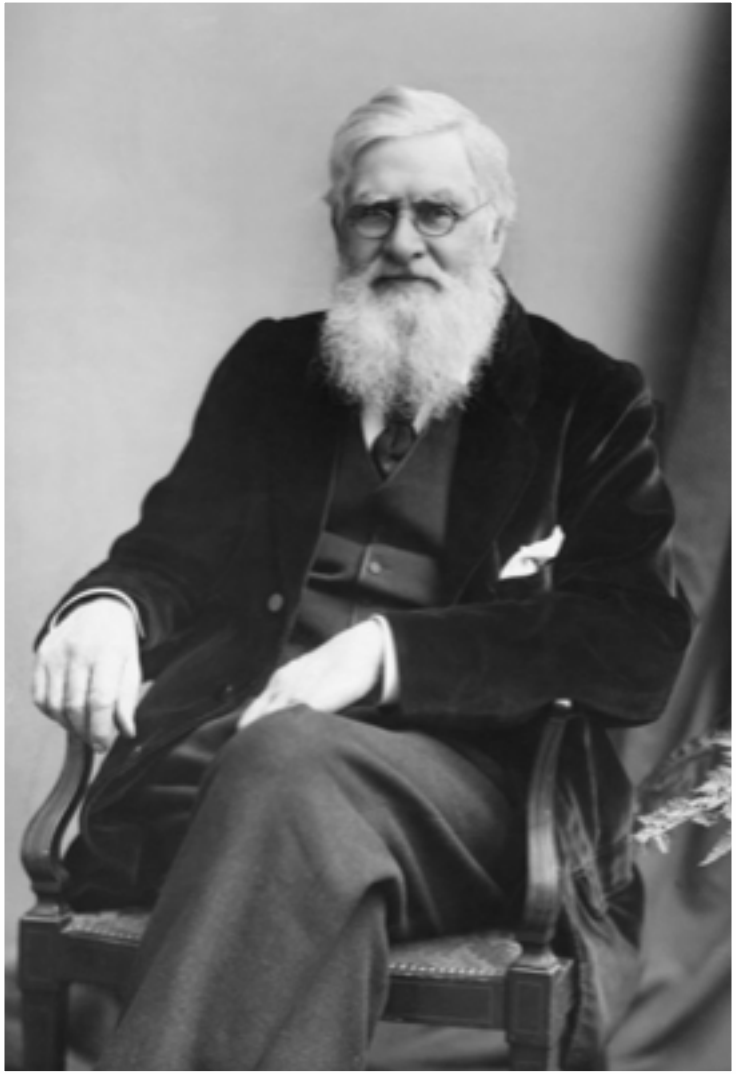
Code of Laws
Currency
Feudalism
Gunpowder
Combustion
Construction
Democracy
Religion
Metallurgy
Electricity
Irrigation
Engineering
Banking
Printing Press
Industrializati
Literacy
Monarchy
University
Steam Power
Railroad
Mathematics
Navigation
Invention
Steel
Change Selection
Look Around
Civilopedia
Exit

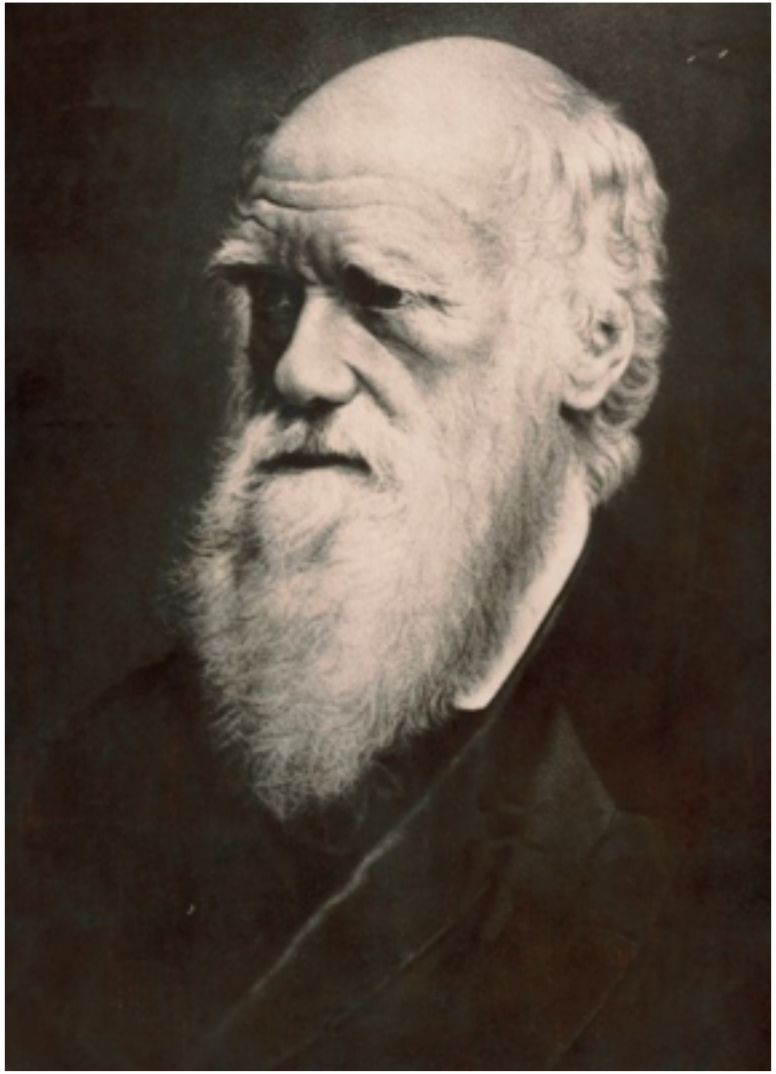
CAMPUSNETWORK - Microsoft Internet Explorer
CAMPUSNETWORK
COLUMBIA UNIVERSITY
THE POWER OF KNOWLEDGE
MAIN MENU
MY ACCOUNT
LATEST EXHIBITIONS
LATEST USERS
LATEST JOURNALS
LATEST FAVORITES
FEATURED EXHIBITION
FEATURED PAGES
FEATURED MEMBERS
LATEST COMMENTS
View All Exhibitions
View All Favorites
HISTORY

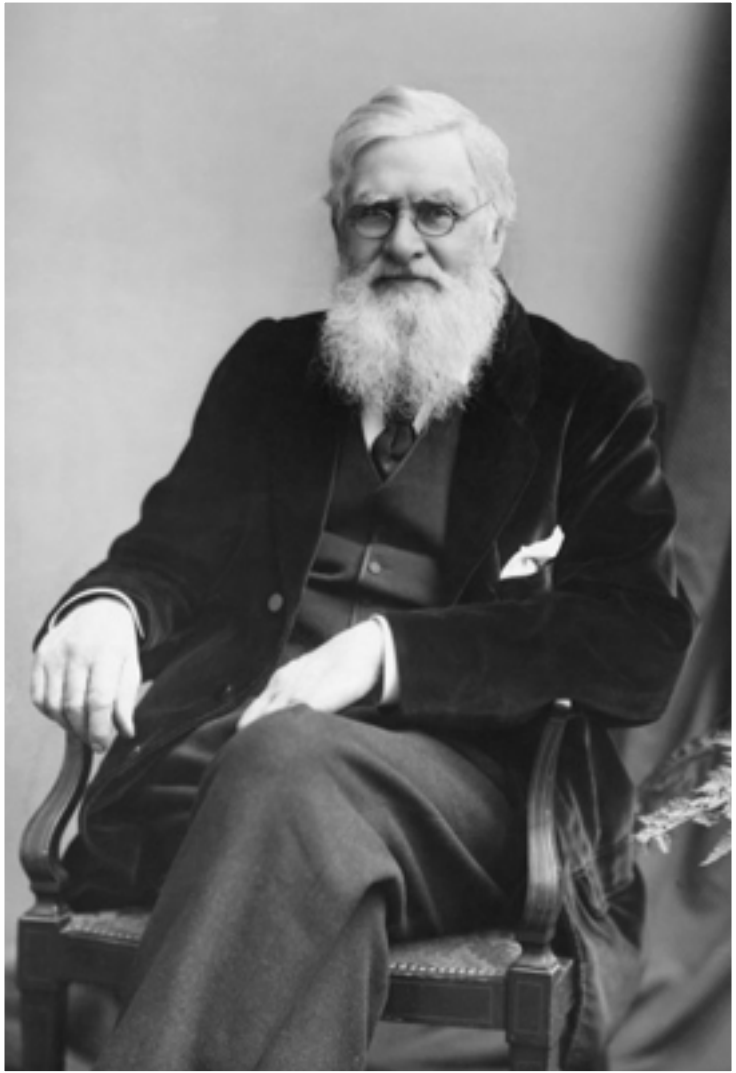
[thefacebook]
home search global social net invite faq logout
quick search go
My Profile [edit]
My Friends
My Groups
My Parties
My Messages
My Account
My Privacy
Summer Jewish Adventure
New York City
Brian Moore's Profile
Puget Sound
Picture
Send Brian a Message
Poke Him!
Connection
You are in a relationship with Brian.
Mutual Friends
Access
Brian is currently logged in from a non-residential location.
Friends at Puget Sound
Kerala Hise
Jennifer McFadden
Amy Graeber
Sarah Spurlock
Vu Tran
Briana Skins
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
Screenname: Doctabu
Mobile: 414.702.7426
Websites: http://www.doctabu.com
http://www.livejournal.com/users/doctabu
http://www.flickr.com/photos/doctabu
Personal Info:
Looking For: Friendship
Interested In: Women
Relationship Status: In a Relationship with Rachel Buethe (Tiny Tykes Day Care)
Political Views: Very Liberal
Interests: Film, Graphic Design, Video Editing, Computers, Bowling, Dancing, Acting, Singing, Listening to Decent Music, Sleeping, Being Crazy
Favorite Music: Beck, The Beatles, They Might Be Giants, Phoenix, Paul Simon, OutKast, Avenue Q, Radiohead, Red Hot Chili Peppers, Steely Dan, Styx, U2, Zero 7
Favorite Movies: Office Space, Garden State, Eternal Sunshine of the Spotless Mind, Triplets of Belleville, Amelee
About Me: What is there to say? I dunno. I'm a wild 5'10" skinny-ass that wants to be creative. I like making movies and stuff like that

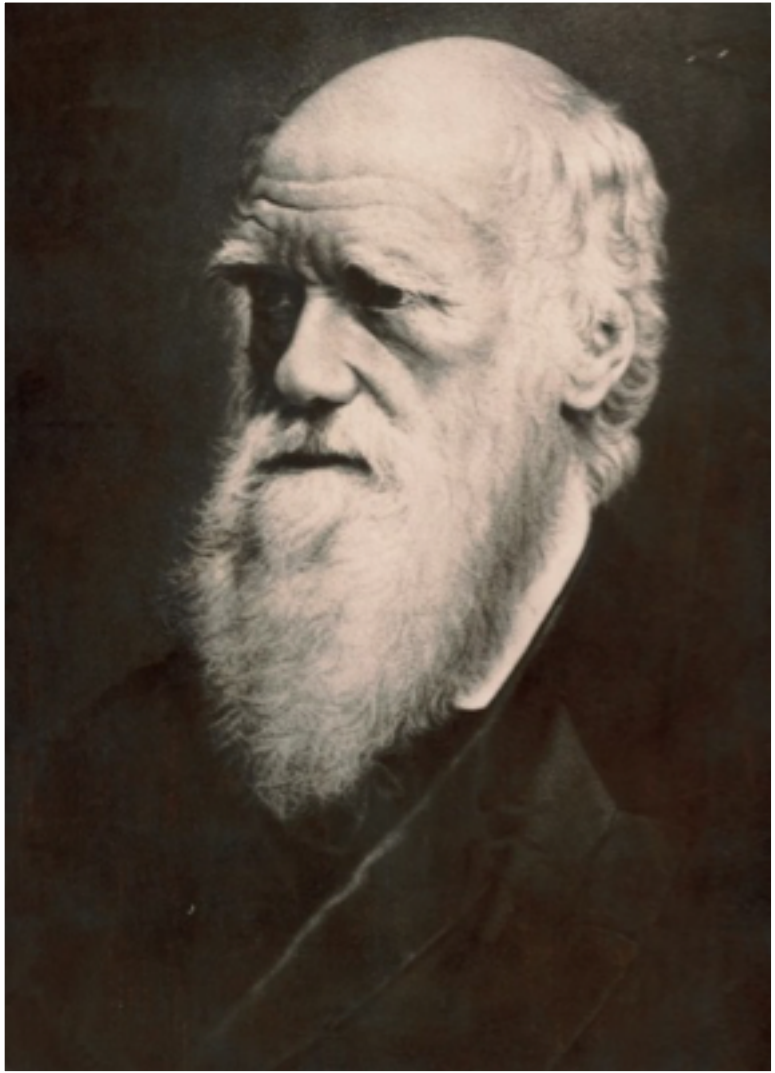
同步发明

1858







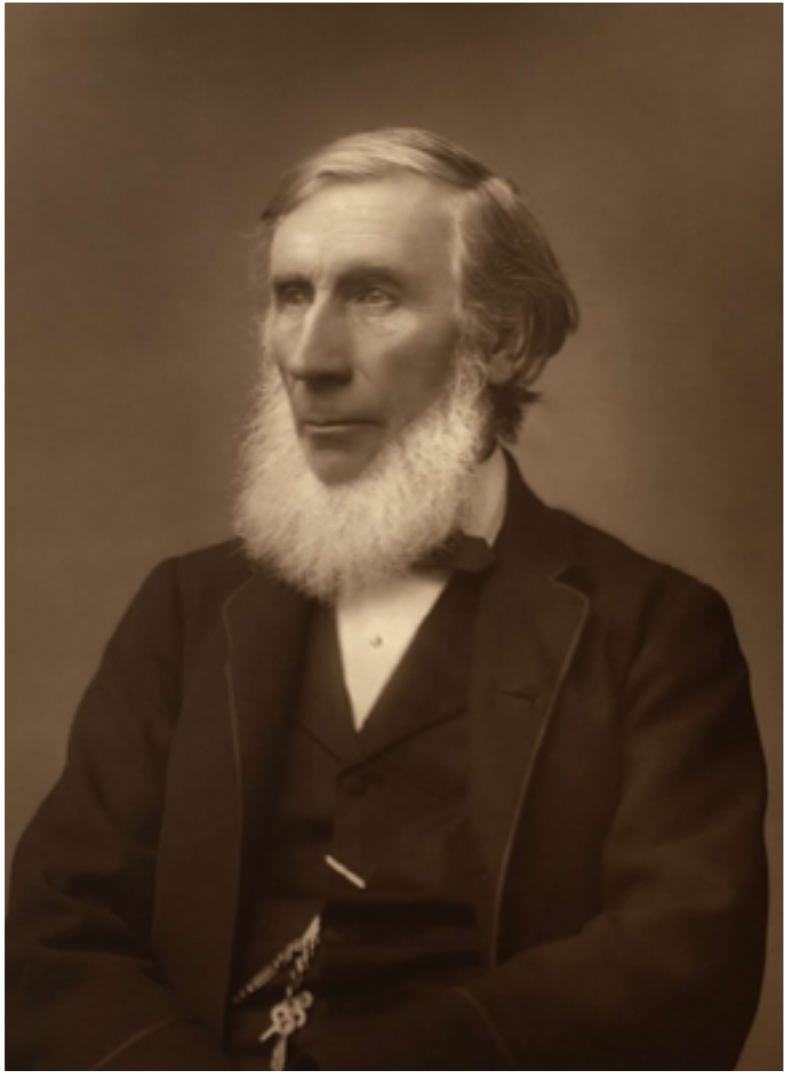


“这同蒸汽机的离心调速器是一个工作原理，离心调速器会检查并纠正任何异常行为，以防止其恶化到显著程度；依据同样的原理，动物世界中的任何不平衡缺陷也不会达到显著程度”

- 阿尔弗雷德·拉塞尔·华莱士，1858 年

1687

1856



CIRCUMSTANCES

Affecting the Heat of the Sun's Rays.

BY MRS. EUNICE FOOTE.

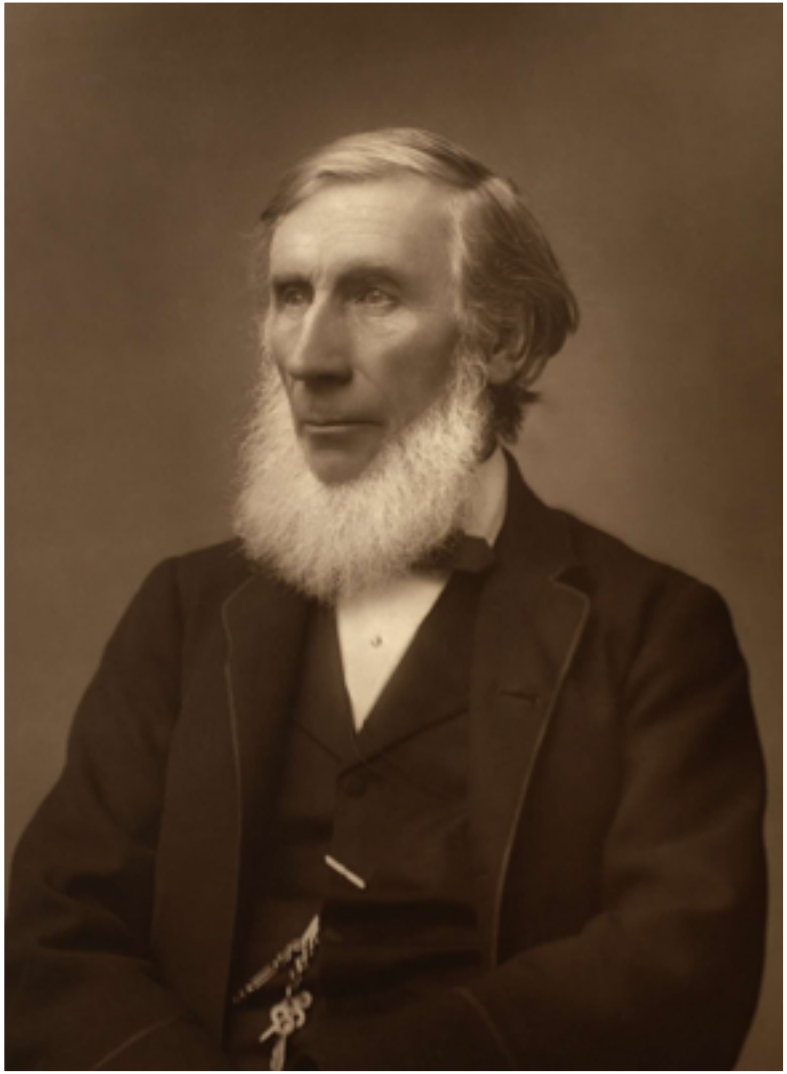
Read before the American Association for the Advancement of Science,

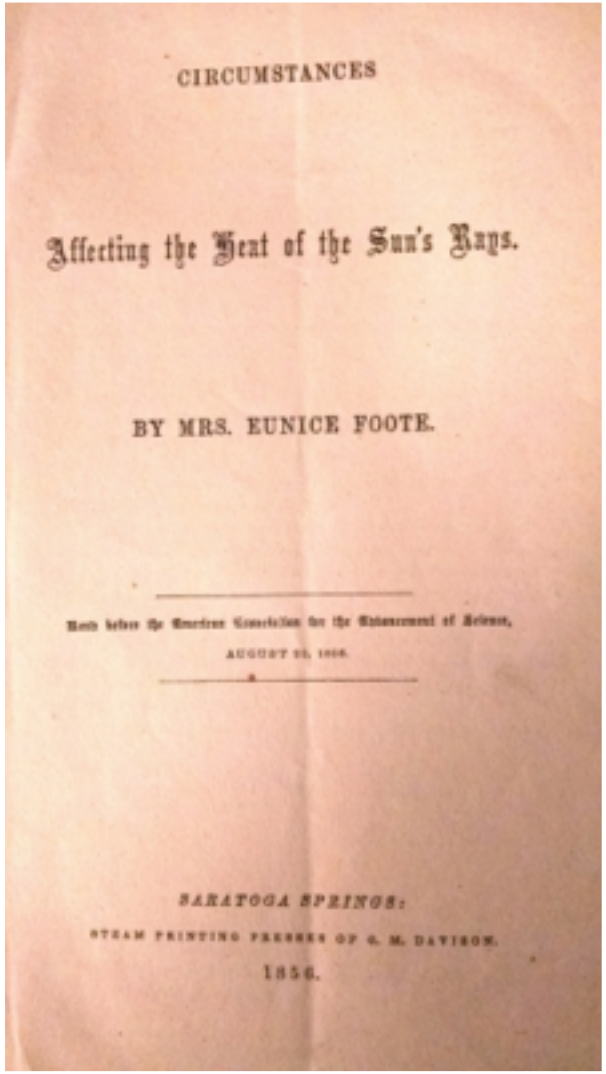
AUGUST 23, 1856.

SARATOGA SPRINGS:

STEAM PRINTING PRESSES OF G. M. DAVISON.

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 23, 1856.

SARATOGA SPRINGS:

STEAM PRINTING PRESSES OF G. M. DAVISON.

1856.

同步发明

21 世纪 10 年代

CNCF 云原生定义 v1.0

云原生技术有利于各组织在公有云、私有云和混合云等新型动态环境中，**构建和运行可弹性扩展的应用**。云原生的代表技术包括容器、服务网格、微服务、不可变基础设施和声明式 API。

这些技术能够构建容错性好、易于管理和便于观察的松耦合系统。结合可靠的自动化手段，云原生技术使工程师能够轻松地对系统作出频繁和可预测的重大变更。

云原生计算基金会 (CNCF) 致力于培育和维护一个厂商中立的开源生态系统，来推广云原生技术。我们通过将最前沿的模式民主化，让这些创新为大众所用。

Cambrian Era

Alibaba Sigma

阿里巴巴

Alibaba.com™

Amazon Apollo

amazon

Apache Mesos

Apache

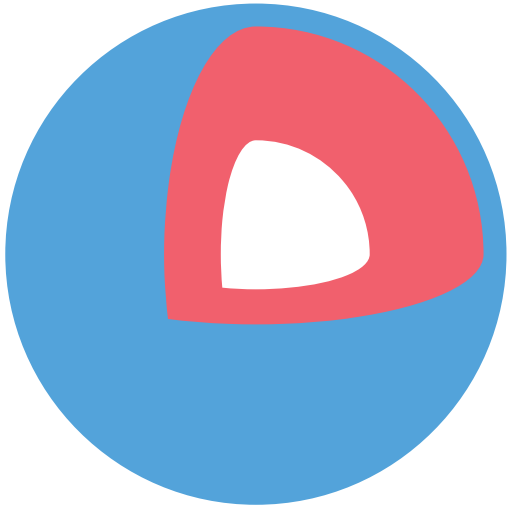
MESOS™

Baidu Matrix

Cloud Foundry Garden 和 Diego

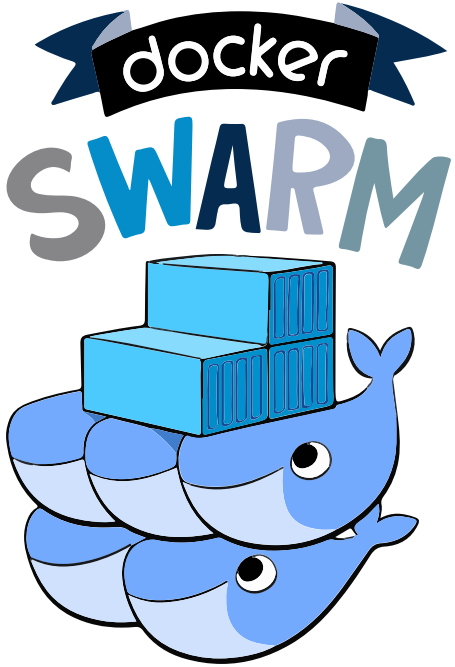
CLOUD FOUNDRY

CoreOS Fleet



CoreOS

Docker Swarm



Facebook Tupperware

Google Borg 和 Omega

Google

HashiCorp Nomad

HashiCorp

Nomad

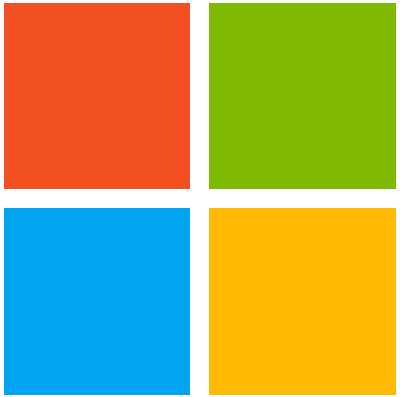
IBM Platform Symphony

Joyent Triton

Joyent™

Lyft v3 Infra

Microsoft Service Fabric



Microsoft

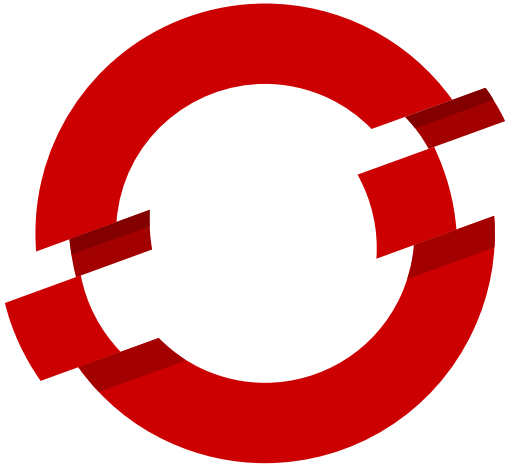
Netflix Titus

NETFLIX

Rancher Cattle

RANCHER®

Red Hat OpenShift v2 Broker



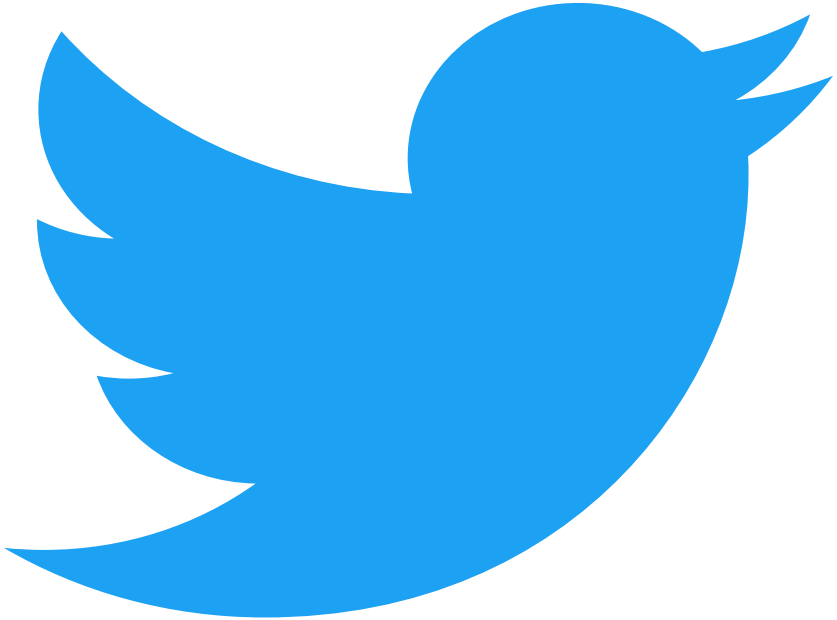
RED HAT®
OPENSHIFT

Spotify Helios

Tencent Gaia

Tencent 腾讯

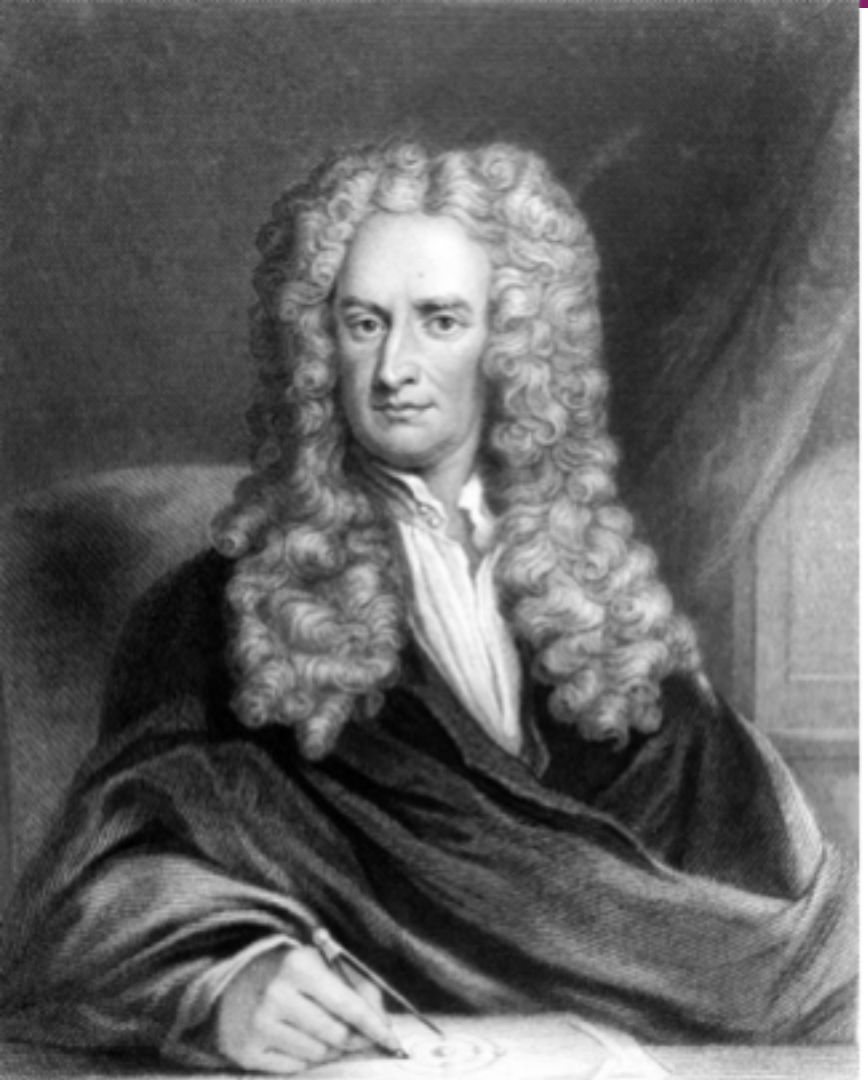
Twitter Aurora



Uber Peloton

Uber

人人皆可感知



“如果说我比别人看得更远些，那是因为我站在了巨人的肩膀上”

- 艾萨克·牛顿

“沙特尔学校的校长伯纳德曾说过我们都是蹲坐在巨人肩膀上的侏儒……”

- 索尔兹伯里的约翰

一切都是智慧的融合

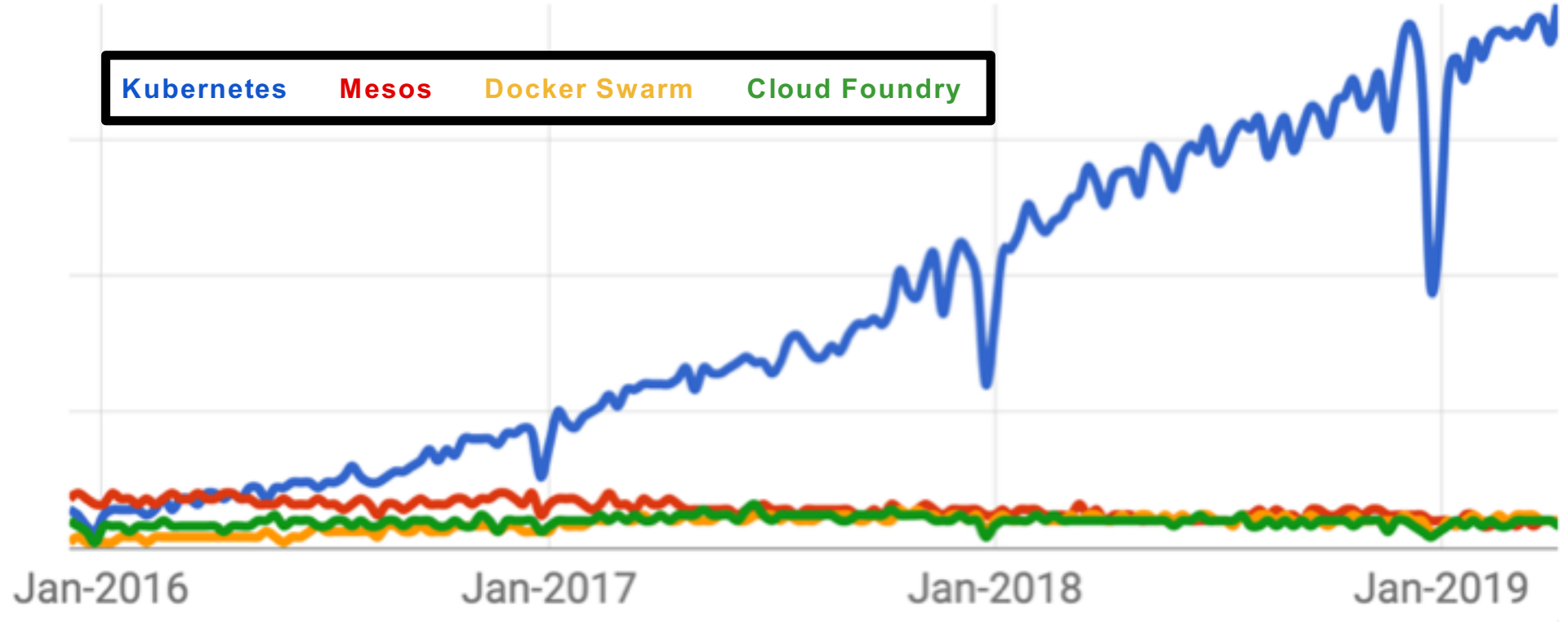
2019

KubeCon

CloudNativeCon

OPEN SOURCE SUMMIT

China 2019


Kubernetes
Mesos
Docker Swarm
Cloud Foundry
Jan-2016
Jan-2017
Jan-2018
Jan-2019

why

kubernetes?

1 它真的很好用

② 厂商中立的开源

certified

kubernetes

3 贡献者

人类发明了 SOYLENT GREEN！

1 它真的很好用

2 厂商中立的开源

3 人才至关重要

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

Code of Laws
Currency
Feudalism
Gunpowder
Combustion
Construction
Democracy
Religion
Metallurgy
Electricity
Irrigation
Engineering
Banking
Printing Press
Industrializati
Literacy
Monarchy
University
Steam Power
Railroad
Mathematics
Navigation
Invention
Steel
Change Selection
Look Around
Civilopedia
Exit

“进步没有捷径，也非易事”

- 玛丽·居里

PEOPLE
MEN AND
WOMEN
AT WORK

谢谢

@ dankohn1

尾注

- Slate：其他社交网络，Christopher Beam
- 科技树，Tuur Ghys
- Quartz：同步发明
- 唯一发明的神话，Mark Lemley
- 纽约人：人人皆可感知，Malcolm Gladwell
- Smithsonian.com：这位女性科学家定义了温室效应，Leila McNeil
- ACM 队列：Borg、Omega 和 Kubernetes
- 一切都是智慧的融合，第 2 集
- 上海中心大厦
- David Roberts 推特