

# Grow with Intel in Open Source World

Dr. Shane Wang
Special Contribution Award Winner
Engineering Manager at Intel OTC
Individual Director of OpenStack Foundation

## Agenda

- About Shane Wang
- My Journey in Open Source
- My Contribution to Open Source and OpenStack
- Open Source @ Intel
- My Plan for Future



## About Shane Wang (王庆)

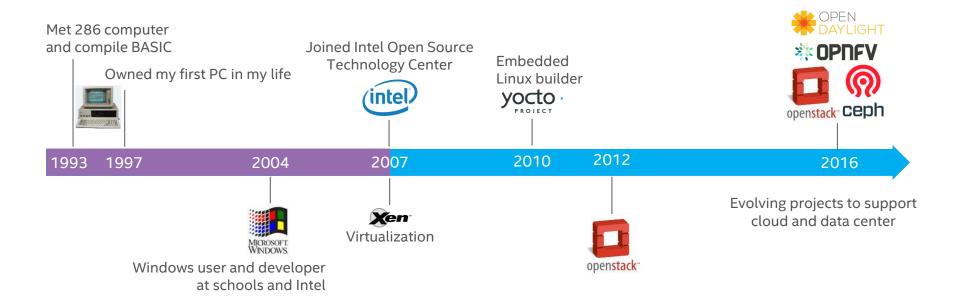
- Born in May, 1977 in Nanchang,
   Jiangxi Province in south of China
- Studied in Nanchang, Xiamen, and then Shanghai, and now lives in Shanghai
- Got PhD degree on computer science from Fudan University in 2004, and joined Intel
- Now acts as engineering manager on cloud at Intel OTC







## My Journey in Open Source





## My Contribution to Open Source and OpenStack

- Code contribution to Open Source since 2007
  - One of the major contributors and maintainers of tboot an open source pre-kernel/VMM module for dynamic root of trust
  - CPUID-spoofing, memory online and offline in Xen
  - A couple of Yocto releases for embedded Linux
  - OpenStack feature implementation in Nova (Compute), Ceilometer (Telemetry), Keystone (Authentication), Cinder and Swift (Storage), Watcher (Optimization), etc.
- Leadership
  - Elected to be Individual Director of OpenStack Foundation board in 2015 & 2016
  - Grew core developers in Nova, Ceilometer, Keystone, Watcher etc. in OpenStack
- Influence
  - An amount of speeches at Forums, Meetups, Workshops, Conferences etc. since 2014



## OpenStack Foundation

Founded in 2012 and now is the 2<sup>nd</sup> largest foundation behind Linux Foundation, containing 50,000 members

Technical Committee Board of Directors

TECH COMMITTEE

1 3 TOTAL MEMBERS

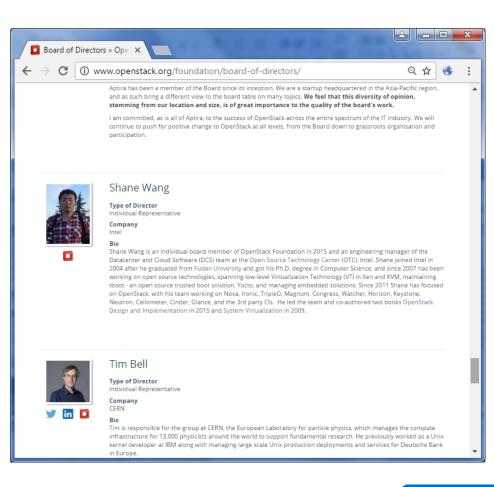
DETERMINES CROSS-PROGRAM ISSUES



User Committee



http://www.openstack.org/foundation/



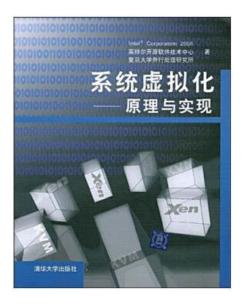


## OpenStack Bug Smash

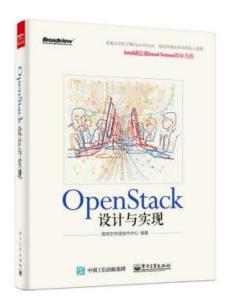




## Books



- Drove the team to write the first theoretical book on system virtualization in Chinese
- Published in 2009



- Led the team to write the first book on OpenStack development in Chinese
- Published in May 2015, and got 6 batches and 11,000 copies
- Now on the edition 2





## OpenStack Ecosystem in China







## OpenStack Ecosystem in China

- More and more companies joined OpenStack
  - Huawei, 99cloud, EasyStack, Awcloud, Kylin cloud,
    UnitedStack, China Mobile, Letv Cloud Computing, ZTE
    Corporation, UMCloud, xiangCloud, Huron, NetEase,
    H3C, etc.
- More and more companies adopted OpenStack
  - China Mobile, China Telecom, Shenzhen Stock
     Exchange, Bai Lian, State Grid, UnionPay, Hubei
     Province Gov, etc.

Commit 贡献	Newton	Newton	Newton	Mitaka
上榜中国企业	国内排名	国际排名	commis	国际排名
华为 ( Huawei )	1	11	913	8
易捷思达 (EasyStack)	2	12	861	12
中兴 ( ZTE Corporation )	3	13	800	106
九州云 ( 99Cloud )	4	14	793	14
麒麟云 ( Kylin Cloud )	5	25	218	44
海云捷迅 ( Awcloud )	6	41	86	37
云途腾(t2cloud)	7	43	80	无
新华三 ( H3C )	8	55	39	113
大唐高鸿 ( GohighSec )	9	64	33	无
有云 ( UnitedCloud )	10	67	30	39
乐视云 ( Lety Cloud Computing )	11	78	19	100
中国移动 ( China Mobile )	12	87	14	52
华云数据 ( Chinac )	13	114	6	无
优铭 ( UMCloud )	14	115	5	70
烽火通信 (Fiberhome)	15	124	4	无
爱数 ( EISOO )	16	131	3	无
北京国电通(Beijing GuoDianTong)	17	143	2	无
联想 ( Lenovo )	18	146	2	无
休伦 ( Huron )	19	149	2	142
云英 ( Cloudin )	20	169	1	无
电科华云 ( China Cloud )	21	172	1	无
中国银联 ( China UionPay )	22	175	1	无
赛斯特 ( CertusNet )	23	181	a open	*Ecker



## Open Source is Mainstream Today









## Why Open Source, Why Intel?

















Creating solutions optimized for Intel® architecture



Drives hardware and software innovations and standards, reducing engineering costs, and accelerating time to market for new products

\*Other names and brands may be claimed as the property of others. Source: wikipedia.org, opensource.com



## Open Source @ Intel

### Contributing Talent and Resources and Enabling Solutions



#### People

**Technologists** Software Architects Maintainers Software Engineers Sales & Marketing



#### **Projects**

Power Efficiency Connectivity Security High Performance Virtualization & Manageability Parallelism Graphics



#### Solutions

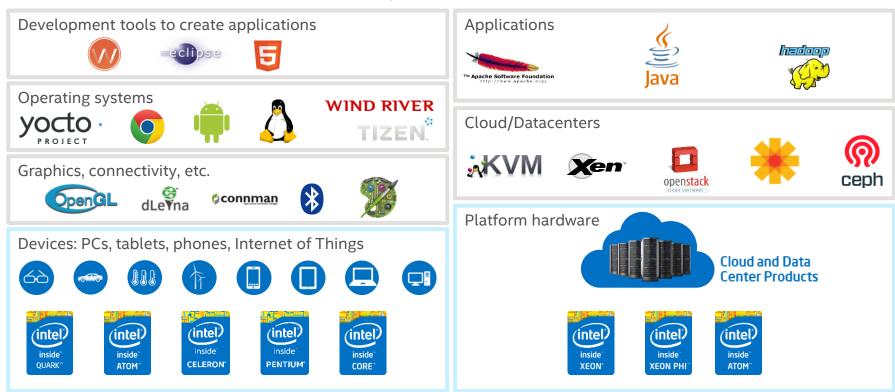
**High Performance Computing** Web Technologies Data Center Cloud IoT Big Data Mobile & more...

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## Intel's Contributions Optimize Features & Platforms



\*Other names and brands may be claimed as the property of others.



## Open Source and Technology Leadership



Leading Contributor to Linux\* Kernel Consistently in the top three subsystem owners of the Linux Kernel for the past decade



#1 Contributor to Intel® Graphics for Linux

Highly optimized for power, footprint, performance; high video quality



Leading Contributor to Android\* Open Source Project Optimizing Android OS for Intel® architecture



Improving Performance and Capabilities for HTML5\*

Defining web standards, enabling cross-device development



Top External Contributor to Webkit\*/Chromium\*
Richer web page rendering, smoother video, faster page loading



OpenStack\* Board Member & Contributor Foundation board member and a contributor across all the major projects today

\*Other names and brands may be claimed as the property of others.



# Intel® Cloud for All

## Unleash Tens of Thousands of New Clouds

## Invest

in creating enterprise ready, easy to deploy SDI solutions

# **Optimize**

for high efficiency clouds across workloads

## Align

the industry to accelerate cloud deployments





## My Plan for Future

- Focus on two hardest and hottest areas in cloud
  - Storage & Network
- Continuously engage in advanced technologies and projects, besides OpenStack
  - Containers, Kubernetes, Ceph, ODL, etc.
- Promote open source primarily in China and Asia for cloud and data center to increase adoptions
- Closely collaborate with partners in the ecosystem
- Support our customers sincerely to make WIN-WIN with open source
- Innovate for new cloud technologies and projects, and open source



