

# BAOHUA YANG

## Contact Info

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## More About Me

Homepage: [yeasy.github.io](https://yeasy.github.io)  
Projects: [github.com/yeasy](https://github.com/yeasy)

## TECHNICAL SKILL

Solution architect, technical consultant and open-source developer; Chief scientist on Cloud and Fintech; TPC/reviewer of numbers of top-quality conferences and journals.

- Extensive knowledge on system & networking, e.g., Blockchain, Cloud, container and BigData.
- Core developers to open-sources projects, e.g., Hyperledger, OpenStack and OpenDaylight.
- Familiar with distributed system architecture and protocols, e.g., Mesos, Spark, Kubernetes.

## BACKGROUND

Aug 2017 ~ Present	Oracle Blockchain	Principal Architect
Aug 2017 ~ Present	Hyperledger	TSC Member
May 2017 ~ Aug 2017	IBM GCG Blockchain	Chief Consultant
Dec 2016 ~ Present	Hyperledger Technical WG China	Chair
Jan 2013 ~ Aug 2017	IBM Research	Staff/Senior Researcher
Sep 2010 ~ Sep 2011	UC Berkeley	Visiting Researcher
Aug 2003 ~ Jan 2013	Tsinghua University	B.E./M.E./Ph.D.

## PROJECTS

Chief Consultant	Blockchain Solution	Jan 2017 ~ July 2017
Instruct the architect and solution design, and solve key problems from business to technologies.		
Architect	Container Cloud Solution	Jan 2017 ~ July 2017
Solution design, solve key technical problems in networking and platform, main techniques include Docker, Kubernetes and Calico.		
Chief Architect	Blockchain Service Platform	Jan 2016 ~ Dec 2016
Design the architecture, develop the core platform, and deploy the platform into several Clouds.		
Lead Architect	Watson Health Cloud Platform	Jan 2015 ~ Dec 2016
Design the architecture, and the integration solution on Softlayer Datacenters, main techniques include networking, services, data analysis, etc.		
Lead Architect & Chief Engineer	High-performance Cloud	Jan 2015 ~ June 2016
Design and deploy the network related services for IBM Cloud, main techniques including OpenStack, ELK Stack, Vyatta, etc.		
Lead Architect & Chief Engineer	POWER Tech Cloud	Jan 2015 ~ June 2016
Design and implement the access solution for IBM POWER Cloud, main techniques including Soft-layer Datacenter, OpenStack, VPN, Vyatta, etc.		
Architect & PM	Network Data Analysis Solution	Jan 2015 ~ Dec 2015
Design and implement the analysis solution for large-scale network, main techniques including traffic sniffer techniques, ELK Stack, etc.		
Architect & Chief Engineer	Enterprise Mobile Cloud Platform	Aug 2014 ~ July 2015

Design the architecture, implement the backend message exchanging system, main techniques including coroutine programming, database, MQTT protocol, etc.

Architect & Core Engineer	SDN-VE product	Jan 2013 ~ July 2014
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SDN-VE is the flagship product in SDN. Design and develop the service chaining component, mainly including SDN, OpenDaylight, and Java programming with OSGI.

Researcher & Developer	Cloud Security Solution	Jan 2013 ~ Dec 2013
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Design and develop the IPS as a Service platform for feedback based security provision, mainly including OpenStack, OpenvSwitch, Floodlight, and IBM XGS product.

#### SELECTED HONOR

IBM Ph.D. Fellowship Awards	IBM	2011	9 winners in Greater China
First Class Scholarship	Tsinghua Univ.	2006, 2009, 2011	Top 5%

#### INVITED SPEAK

- Hyperledger Project and Community in China, Linux Con., June 2017, Beijing
- Hyperledger Cello Design and Roadmap, Hyperledger Hackfest., June 2017, Beijing
- Hyperledger Fabric Architecture and Development, QCon., April 2017, Beijing
- Design Efficient Blockchain Service Platform, Python Con., Oct 2016, Beijing
- Key technologies in Blockchain, Technical seminar, July 2016, Beijing
- Blockchain and Hyperledger, Hyperledger Meetup, June 2016, Beijing
- Optimizing and Extending Overlay Networking for Containers, OpenStack Summit, Oct 2015, Tokyo
- Employing Docker into Devops, Bluemix and CloudFoundry Meetup, July 2015, Beijing

#### TECHNICAL BOOKS

- Hyperledger Fabric Code Analysis, open-sourced, May 2016
- Blockchain Technical Guide, open-sourced, Oct 2015
- Docker Container in Action, China Machine Press, Jan 2015
- Docker Container Practice, open-sourced, Aug 2014, 1,000,000+ reader
- OpenStack Neutron: Design and Architecture, open-sourced, Feb 2014, 1,00,000+ reader
- Mininet: Design and Implementation, open-sourced, Oct 2013, 1,00,000+ reader
- OpenStack Source Code Analysis: Kuryr, open-sourced, Nov 2015
- OpenStack Source Code Analysis: Magnum, open-sourced, June 2015
- OpenStack Source Code Analysis: Neutron, open-sourced, April 2014, 1,00,000+ reader
- OpenStack Source Code Analysis: Heat, open-sourced, Aug 2014

## PATENT

- Methods and Apparatus for Multituple Packet Classification, YANG BAOHUA, XUE YIBO, LI JUN
- Methods and Apparatus for Collaboration of Server and Switch to Optimize Data Center Network\*, ZHANG YUE, ZHENG KAI, LIU TIANCHENG, LIU HANG, YANG BAOHUA
- Methods and Apparatus for Accelerating Resource Accessing in Enterprise Network, YANG BAOHUA, ZHANG YUE, ZHENG KAI, LIU TIAN CHENG
- Method and Apparatus for Realizing Service Chaining in Cloud Environment, YANG BAOHUA, ZHENG KAI, ZHANG YUE, LIU TIANCHENG
- Method to Generate the Switch Rules Timeout in Software Defined Networks, YANG BAOHUA, ZHENG KAI, ZHANG YUE, LIU TIANCHENG
- Methods and Apparatus for security enhancement of DNS, ZHANG YUE, YANG BAOHUA, ZHENG KAI, LIU TIANCHENG
- An offloading schedule system for mobile cloud computing, XUE CHAO, ZHANG YUE, WANG YU, YANG BAOHUA, YAN JUNCHI, YANG FAN
- System and Apparatus for Data Transmission with Bluetooth Energy-efficient Devices, YANG BAOHUA, SUN KEWEI, LIU TIANCHENG, XUE CHAO, LI YUBO
- System and Apparatus for Building Efficient Container, YANG BAOHUA, YANG LIN, LIU TIANCHENG, XU JINGMIN, CHEN PENGFEI

## RECENT PUBLICATION

- BitCuts: Towards Fast Packet Classification for Order-independent Rules  
Zhi Liu, Xiang Wang, Baohua Yang and Jun Li, ACM Special Interest Group on Data Communication (ACM SIGCOMM) poster, London, UK, August 2015.
- LazyCtrl: Scalable Network Control for Cloud Data Centers  
Kai Zheng, Lin Wang, Baohua Yang, Yi Sun, Yue Zhang and Steve Uhlig, 35th International Conference on Distributed Computing Systems (ICDCS) poster, Columbus, Ohio, June 2015.
- Keep Forwarding: Towards K-link Failure Resilient Routing  
Baohua Yang, Junda Liu, Scott Shenker, Jun Li and Kai Zheng, 33rd IEEE International Conference on Computer Communications (INFOCOM 2014), Toronto, Canada, April 2014.
- Practical Multi-tuple Packet Classification using Dynamic Discrete Bit Selection  
Baohua Yang, Jeffrey Fong, Weirong Jiang, Yibo Xue and Jun Li, IEEE Transactions on Computers, pp 424-434, Vol. 63, No. 2, Feb 2014.
- Data-Driven Network Connectivity  
Junda Liu, Baohua Yang, Scott Shenker and Michael Schapira, 10th ACM Workshop on Hot Topics in Networks (HotNets-X), Cambridge, MA, November 2011.
- SMILER: Towards Practical Online Traffic Classification  
Baohua Yang, Guangdong Hou, Lingyun Ruan, Yibo Xue and Jun Li, 7th ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS 2011), Brooklyn, NY, October 2011.
- Scalable NIDS via Negative Pattern Matching and Exclusive Matching  
Kai Zheng, Xin Zhang, Zhiping Cai, Zhijun Wang and Baohua Yang, 29th IEEE International Conference on Computer Communications (INFOCOM 2010), San Diego, CA, USA, March 2010.(acceptance rate=17.5%)