

BAOHUA YANG

Contact Info

(+86) 010-5874-8169
yangbaohua@gmail.com

More About Me

Homepage: yeasy.github.io
Projects: 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

May 2017 ~ Present	IBM GCG Blockchain	Chief Consultant
Dec 2016 ~ Present	Hyperledger Technical WG China	Chairperson
July 2016 ~ Present	CUFE Blockchain Lab	Technical Expert
Jan 2013 ~ Present	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 ~
Instruct the architect and solution design, and solve key problems from business to technologies.

Architect **Container Cloud Solution** Jan 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 ~
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

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

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%)