BAOHUA YANG

Basic Info
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More About Me
Homepage: yeasy.github.io
Projects: github.com/yeasy
Blog: blog.csdn.net/yeasy

TECHNICAL SKILL

9 Years on Cloud Computing and Distributed System: As product architect, open-source contributor and technical writer; Love innovative technologies and challenges.

- Extensive knowledge of innovative techniques, e.g., SDN, container, IoT, BigData and Blockchain.
- Deeply understand the networking architecture, protocols, and solutions.
- Actively contribute to open-sources, e.g., OpenStack, Docker, OpenvSwitch and OpenDaylight.
- Familiar with the design of distributed systems, e.g., Mesos, Spark, Kubernetes, Hyperledger.

BACKGROUND

Jan 2013 ∼ Present	IBM Research	Research Scientist
Jan 2012 ∼ Dec 2012	IBM Research	Research Intern
Sep 2007 ∼ June 2016	Tsinghua University	M.E. and Ph.D.
Sep 2010 ∼ Sep 2011	UC Berkeley	Visiting Researcher
Aug 2003 ∼ July 2007	Tsinghua University	Bachelor Degree

EXPERIENCE

Chief Architect **Blockchain as a Service Platform** Jan 2016 ∼

Design the architecture, develop the core engine, and lead to bring the platform into Cloud.

Lead Architect & Designer **Health Cloud Platform** Jan 2015 ∼

Design the architecture, and the integration solution on Softlayer Datacenters, main techniques include networking, security, services, data analysis, etc.

Architect & Chief Engineer **Innovation Cloud Platform** Jan 2015 ∼ June 2016

Design and deploy the network related services for IBM Cloud, main techniques including OpenStack, ELK Stack, Vyatta, etc.

Architect & Chief Engineer **Power Cloud Platform** Jan 2015 ∼ June 2016

Design and implement the access solution for IBM Power Cloud, main techniques including Softlayer 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.

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 $\sim$ 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.

Assistant Researcher **Extensible SDN Control Platform** Jan 2012 $\sim$ Dec 2012

Design scalable SDN Control architecture to overcome the performance bottleneck. Hack the kernel code in OpenvSwitch and Floodlight, extend the OpenFlow protocol to implement the platform.

SELECTED HONOR

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

INVITED SPEAK

- **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

- **Docker Container in Action**, China Machine Press, Jan 2015, 10,000+ reader
- **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

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, Clumbus, 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, Novermber 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%)