

BAOHUA YANG

Basic Info

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

Technical Websites

Homepage: yeasy.github.io
Projects: github.com/yeasy
Blog: blog.csdn.net/yeasy

TECHNICAL SKILL

8 Years experience on computer networking and cloud computing; Love open-source projects, e.g., OpenStack, OpenvSwitch, OpenDaylight and Docker; Publish several technical books.

- Extensive knowledge of cloud networking, e.g., virtualization, performance and SDN.
- Deeply understand the networking architecture, protocols, and popular techniques.
- Master common system programming languages and tools, e.g., C/C++, Python, Java.

BACKGROUND

Jan 2013 ~ Present	IBM Research	Researcher in Cloud Computing
Sep 2007 ~ Jan 2013	Tsinghua University	M.E. and Ph.D. in Computer Networking
Sep 2010 ~ Sep 2011	UC Berkeley	Visiting Researcher on Computer Science
Aug 2003 ~ July 2007	Tsinghua University	B.E. in Department of Automation

EXPERIENCE

Architect & Designer **BigData Health Platform** Jan 2015 ~ present
Design the architecture, and the integration solution on Softlayer Datacenters, main techniques include networking, security, services, data analysis, etc.

Architect & Designer **Innovation Cloud Platform** Jan 2015 ~ present
Design and deploy the network related services for IBM Cloud, main techniques including OpenStack, Elasticsearch, Vyatta, etc.

Architect & Designer **Cloud Platform** Jan 2015 ~ present
Design and implement the access solution for IBM Power Cloud, main techniques including Softlayer Datacenter, OpenStack, VPN, Vyatta, etc.

Architect & Designer **Network Data Analysis Solution** Jan 2015 ~ present
Design and implement the analysis solution for large-scale network, main techniques including traffic sniffer techniques, elasticsearch, etc.

Architect & Chief Engineer **Enterprise Mobile Cloud Platform** Aug 2014 ~ present
Design the architecture, implement the backend message exchanging system, main techniques including coroutine programming, database, MQTT protocol, etc.

Lead Engineer **OpenStack Heat Plugin** Jan 2014 ~ Dec 2014
Design and develop Heat plugin for internal product, mainly including OpenStack, RESTful API etc.

Core Engineer **SDN-VE production** 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 Platform** 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.

Assistant Researcher **Extensible SDN Control Platform** Jan 2012 ~ 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.

Invited Talk

- **Optimizing and Extending Overlay Networking for Containers**, OpenStack Summit 2015, 2015-10, Tokyo
- **Docker in Devops**, Bluemix and CloudFoundry Meetup, 2015-07, Beijing

PATENT

- **Methods and System for Multiple 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

SELECTED HONOR AND AWARD

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

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.
- **DFC: Towards Effective Feedback Flow Management for Datacenters**
Baohua Yang, Guodong Li, Yaxuan Qi, Yibo Xue and Jun Li, *9th International Conference on Grid and Cloud Computing (GCC 2010)*, Nanjing, China, November 2010.

- **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%)