

BAOHUA YANG

Basic Info

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Technical Websites

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

TECHNICAL SKILL

7 Years of R&D experience on computer networking and cloud computing; Love open-source projects, e.g., OpenStack, OpenvSwitch, OpenDaylight and Docker.

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

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 and Chief Developer **Enterprise Cooperation Platform** Aug 2014 ~ present
Design and develop the architecture for the backend part, mainly including message exchanging, database, MQTT protocol, etc.

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

Researcher & Developer **SDN-VE production** Jan 2013 ~ Oct 2014
Design and develop the service chaining component, mainly including SDN, OpenDaylight, and Java programming.

Assistant Researcher **Extensible SDN Controller Platform** July ~ Dec 2012
Design new SDN scalable Control architecture to overcome the performance bottleneck problem. Hack the kernel code in OpenvSwitch and Floodlight to implement the platform.

Visiting Scholar **Key techniques in Networking** Sep 2010 ~ Sep 2011
Research on network management problems with OpenFlow/NOX under the supervision of Prof. Scott Shenker. Proposed a new routing mechanism to guarantee failure resilience. Wrote 2 papers (1 in IEEE INFOCOM and 1 in ACM HotNets).

R&D Staff **Tsinghua University** Aug 2007 ~ Oct 2009
Work on the 863 Program. Design core modules in router and firewall. Several papers were published (1 in ACM ANCS and 1 in IEEE Transactions on Computers).

PATENT

Published 9 patents on Cloud Computing, Software Defined Networking and Internet of Things.

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

- **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%)
- **DBS: A Bit-level Heuristic Packet classification Algorithm for High Speed Network**
Baohua Yang, Xiang Wang, Yibo Xue and Jun Li, *15th IEEE International Conference on Parallel and Distributed System (ICPADS 2009)*, Shenzhen, China, December 2009.(acceptance rate=28.8%)
- **Packet Classification Algorithms: From Theory to Practice**
Yaxuan Qi, Lianghong Xu, Baohua Yang, Yibo Xue and Jun Li, *28th IEEE International Conference on Computer Communications (INFOCOM 2009)*, Rio de Janeiro, Brazil, April 2009.(acceptance rate=19.7%)