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

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

- Extensive knowledge of cloud networking, e.g., virtualization, SDN, routing and security.
- 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 & Chief Engineer **Enterprise Mobile Product** Aug 2014 ∼ present

Design the architecture and 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 OpenvSwitch, Floodlight, and IBM XGS product.

Assistant Researcher **Extensible SDN Control Platform** July 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.

Visiting Scholar **Forwarding Problems in SDN** 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. Publish 2 papers in top conferences (IEEE INFOCOM, ACM HotNets).

R&D Staff **20 G bps Security Gateway System** Aug 2007 ∼ Oct 2009

863 program. Design and implement the forwarding and classification modules. Published several papers in top conferences & journals (ACM ANCS, 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, 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.
- **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, Novermber 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%)