Baohua Yang

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PROFILE

- 10+ years of experience on distributed system area, with 6+ years as industry architect.
- Strong background with high-performance system and algorithm in data technologies.
- Highly Acknowledged expert on Blockchain and Cloud in the industry and community.

EXPERIENCE

Principal Architect, *Oracle*   2017.8 – present

Lead the Blockchain development team to design and implement Oracle's enterprise Blockchain solutions, and help Oracle towards leadership in blockchain business and market.

Member of Technical Steering Committee, Hyperledger   2017.8 – present

- Lead the technical direction of all Hyperledger projects, and contribute code to projects Fabric and Cello as core designer and developers.
- Chairman of technical working group in China Hyperledger community.

Research Scientist, IBM   2013.1 – 2017.8

Design architecture for enterprise solutions, and bridge emerging innovative techniques (e.g., Blockchain, Bigdata and Cloud) into new products, with resolving critical technical issues.

Researcher – Intern, IBM   2012.1 – 2012.12

Help design and implement the Software-Based-Networking product for Cloud Datacenters.

EDUCATION

Ph.D. of Control Science and Engineering, Tsinghua University   2007.9– 2013.1

Research on key technical topics with distributed systems and high-performance algorithms.
Win the university 1st-class scholarship and IBM Ph.D. Fellowship Award (9 winners in China) in 2009 and 2011.

Visiting Scholar, EECS, University of California, Berkeley   2010.9– 2011.8

Research the advanced distributed system topics (SDN, Security and BigData) in the AMP Lab.

Bachelor of Science and Engineering, Tsinghua University   2003.8 – 2007.7

Win the university 1st-class scholarship in 2006.

INVIATED TALKS

- Develop Enterprise Apps using Oracle Blockchain Platform, Oracle Code, April 2019, Shenzhen
- Technical challenges and future of Blockchain, Blockchain Application Conf., Nov 2018, Beijing
- Key technologies in Blockchain, Blockchain Tech Conf., June 2018, Beijing
- Blockchain to Distributed Ledger, BigData Tech Conf., Dec 2017, Beijing
- Hyperledger Technical Development and China Community, Hyperledger Summit., Nov 2017, Singapore
- Blockchain Challenges, Opportunities and Future, China Database Conf., Oct 2017, Hangzhou
- Hyperledger Project and Community, 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
- Optimizing and Extending Overlay Networking for Containers, OpenStack Summit, Oct 2015, Tokyo

PUBLICATIONS

Books

- Blockchain: Principal, Design and Applications, China Machine Press, Sep 2017. 2018 best-book award.
- Docker Container Technology in Action, China Machine Press, Jan 2015

Papers

- 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, Columbia, 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.

PATENTS

- DAG based Methods and Systems of Transaction Processing in A Distributed Ledger, Baohua Yang, 2018

- System and Apparatus for Building Efficient Container, Baohua Yang, Lin Yang, Tiancheng Liu, Jingmin Xu, Pengfei Chen, 2016
- System and Apparatus for Data Transmission with Bluetooth Energy-efficient Devices, Baohua Yang, Kewei Sun, Tiancheng Liu, Chao Xue, Yubo Li, 2015
- An offloading schedule system for mobile cloud computing, Chao Xue, Yue Zhang, Yu Wang, Baohua Yang, Junchi Yan, Fan Yang, 2014
- Method and Apparatus for security enhancement of DNS, Yue Zhang, Baohua Yang, Kai Zheng, Tiancheng Liu, 2014
- Method to Generate the Switch Rules Timeout in Software Defined Networks, Baohua Yang, Kai Zheng, Yue Zhang, Tiancheng Liu, 2014
- Method and Apparatus for Realizing Service Chaining in Cloud Environment, Baohua Yang, Kai Zheng, Yue Zhang, Tiancheng Liu, 2014
- Methods and Apparatus for Accelerating Resource Accessing in Enterprise Network, Baohua Yang, Yue Zhang, Kai Zheng, Tiancheng Liu, 2014
- Methods and Apparatus for Collaboration of Server and Switch to Optimize Data Center Network, Yue Zhang, Kai Zheng, Tiancheng Liu, Hang Liu, Baohua Yang, 2013
- Methods and Apparatus for Multiple Packet Classification, Baohua Yang, Yibo Xue, Jun Li, 2009