Hongkai Liu

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SUMMARY

- Ph.D. in Computer Science. Enthusiastic about both theoretical and practical work in IT industry. Strive to work with and learn from the best people in the area. Recognized for positive attitude, self-starter, and team spirit.
- 9+ years' experience in software development and test. Solid knowledge on Java programming. Skills of Shell, Python, Ansible and GoLang. Hands-on experience with Docker, Vagrant, and Kubernetes. Familiar with TDD, BDD, and test automation. Involved in development and maintenance of CI/CD tools.
- Proficient in English. Native Chinese, and basic German.

WORK EXPERIENCE

Red Hat Canada LTD., Canada.   Apr. 2019 to now
Quality Engineer
- [Prow-based CI system](#) monitoring: prometheus, alertmanager, and grafana.

Environment: IntelliJ/VSCode, GoLang, Github, Jira, [Kubernetes](#), and OpenShift.

Red Hat Canada LTD., Canada.   Jun. 2017 to Apr. 2019
Software Engineer
- Development of system tests on [OpenShift](#) clusters on AWS, GCE and Azure. Automation of end-to-end OpenShift installation and other tests with Shell, Python, and Ansible.
- Contribution to cluster-loader in extended tests of [github.com/openshift/origin](#) which creates different types of applications configured by OpenShift [templates](#) on an OpenShift cluster.
- Tests on native container storage solutions such as [Gluster](#) and [Rook-Ceph](#).

Environment: IntelliJ/VSCode, Shell/Python/GoLang, Ansible, Github, Jenkins/Travis-CI, Jira, Coveralls, Docker, [Kubernetes](#), and OpenShift.

Elits Canada Inc., Canada.   Mar. 2015 to Jun. 2017
Software Developer (Consultant at Ericsson)
- Support and troubleshooting of [Gerrit](#) server. Engaged in its plugin development. Processing with Logstash the logs produced by Gerrit cluster and Apache servers.
- Implementation and testing of [Eiffel](#), an integrated CI system. Performing tests againsting Docker/Vagrant environment.
- Support and troubleshooting of Jenkins server. Application of and contributions to Jenkins-related tools such as [ATH](#), [HAJP2](#), and MhWeb.

Environment: Core Java 7/8, Springboot/Guice, Cucumber, IntelliJ, Bash/Python, Gerrit/Github, Maven/Gradle, Jenkins/Travis-CI, Jira/Tuleap, SonarQube/Coveralls, Docker, and Vagrant.

Lenovo Corp. Research & Development, China.   Nov. 2013 to Nov. 2014
Development Architect
- Infrastructure design and implementation of Lenovo Push App on Lenovo Android-based smartphones/Tablets.
- Design and development of the Data Reporting System based on Kafka, Logstash, Redis, and Hadoop-based software such as Hive and Impala.
- Implementation of Real-Time Monitoring System which integrates Kafka and [mdrill](#). The system offers ad-hoc query answering to over 2 billion logs per day.

Environment: Core Java 6, Android SDK, MySQL, CDH, mdrill, Redis, Kafka, Logstash, Spring, MyBatis, Netty, JUnit, Eclipse, Linux, SVN, Gerrit, Maven, and Hudson.

Beijing Leadtone Wireless Co., Ltd, China.   Sep. 2010 to Sep. 2013
Senior Software Developer
- Algorithm design and implementation to provide intelligent polling time of POP3 mailboxes.
- Protocol design of Leadtone push platform, based on the research and analysis of Apple's APNs and Google's C2DM. Prototyping Android applications on the platform with Android SDK.
- Protocol standardization with OMA AOI working group.

Environment: Core Java 6, Android SDK, MySQL, Spring, Hibernate, JUnit, Eclipse, Linux, SVN, Maven, and Continuum.

Dresden University of Technology, Germany.   Sep. 2005 to Aug. 2010
Research Assistant
- Engaged in the scholarly research project: Action Formalisms with Description Logics
- Supervise master thesis and seminars in the areas of Description Logics.
- Maintain and update the group website.

Environment: Core Java 5, Lisp, Prolog, LaTex, HTML, Eclipse, Emacs, and Linux.

CERTIFICATE
- VMware Certified Professional on vSphere 5 (VCP5) in Aug. 2012.
- IELTS: 7.5 in Sep. 2013.

EDUCATION
- Ph.D. in Computer Science, Dresden University of Technology, Germany.   Jan. 2010
- M.S. in Computer Science, Dresden University of Technology, Germany.   Mar. 2005
- B.E. in Computer Science, Anshan Science and Technology University, China.   Jul. 2002

PUBLICATION
- Hongkai Liu, Carsten Lutz, Maja Milicic, and Frank Wolter. Foundations of Instance Level Updates in Expressive Description Logics. Artificial Intelligence, 2011.

Full list of papers: http://lat.inf.tu-dresden.de/research/papers.html