

# Hongkai Liu

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## SUMMARY

- 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.
- Ph.D. in Computer Science. 5+ years' experience in Artificial Intelligence and Knowledge Representation including Description Logics, Action Formalisms, and Temporalized Logics.
- 6+ years' experience in software development. Solid knowledge on Java programming.
- Hands-on experience with Docker, Docker-Compose, and Vagrant. Familiar with TDD, BDD and test automation. Involved in development and maintenance of CI/CD tools.
- 1+ years' experience in big data tools such as Kafka, Logstash, Redis, Hadoop, Hive and Impala. 1+ years' experience in RabbitMQ, Elastic, and MongoDB.
- Proficient in English. Native Chinese and basic German.

## WORK EXPERIENCE

**Red Hat Canada LTD., Canada.**

Jun. 2017 to now

**Quality Engineer**

- System test on [OpenShift](#).

**Environment:** IntelliJ, Bash/Python/Go, Gerrit/Github, Jenkins/TravisCI, 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/TravisCI, 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 Client. System integration on Lenovo Android-based smartphones/Tablets and Lenovo Service Framework.
- Design and development of the Data Reporting System based on Kafka, Logstash, Redis and Hadoop-based software such as Hive and Impala. The Push Server is responsible for over 2 million data records per day and those data are collected, analyzed and visualized by the system and reported to the business team.
- Implementation of Real-Time Monitoring System which integrates Kafka and [mdrill](#). The system offers ad-hoc query answering to the logs, over 2 billion per day from Nginx clusters and is able to detect the change on the cluster load up to minute.

**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.
- Leading integration on OX of Open-Xchange and Zimbra of VMWare, providing enterprise Email solution to small to medium sized businesses.
- Implementation of back-end Web Applications and front-end web interfaces for users to manage their account information stored on an OpenLDAP server.
- 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 of academic conferences and workshops and thesis is available:

<http://lat.inf.tu-dresden.de/research/papers.html>