

# Kun Xie

SENIOR SOFTWARE ENGINEER

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*"Live with passion!"*

## Professional Summary

- ✓ 10 years working experience in Linux and Windows network programming in C, C++ and Java.
- ✓ 7 years engineering experience on distributed system design and development.
- ✓ 5 years' experience and deep understanding of architecture design/optimization. Key contributor for a web infrastructure with 2-billion hits per day, with strong skills in distributed network server architecture design/profile/optimization.
- ✓ Ability to work well independently as well as within a team.
- ✓ Highly motivated, energetic, well organized, disciplined and like being challenged.
- ✓ Team player with high empathy and good social skills.

## Education

### UQAC (Université du Québec à Chicoutimi)

M.S. IN COMPUTER SCIENCE

*Chicoutimi, Québec, Canada*

*Jan. 2014 - Aug. 2016*

### NKU (Nankai University)

B.S. IN SOFTWARE ENGINEERING

*Tianjin, China*

*Sep. 2000 - Jul. 2004*

## Experience

### UQAC (Université du Québec à Chicoutimi)

RESEARCH ASSISTANT & TEACHING ASSISTANT (PROF. SYLVAIN HALLÉ)

*Chicoutimi, Québec, Canada*

*Aug. 2014 - PRESENT*

- Designed algorithms to evaluate LTL formulæ by manipulating Bitmaps and implemented them with Java.
- Implemented a one-way communication channel with optical codes.
- Developed a software suite to import and synchronize a geoname database for a research project with the engineers from TLM.
- Took part in writing two papers for publication.
- Evaluated homework and tests of the students.

### Lenovo

ADVISORY RESEARCHER

*Beijing, China*

*Aug. 2010 - Jan. 2014*

- Designed and implemented a distributed storage system supporting scalability, load-balancing, fail-over, cross-datacenter replication, log collection and analysis. Key customers included government, banks, and financial and assurance companies.
- Built technology road map and strategic direction for the product.
- Led a team of 10 engineers and established a Scrum project management process.
- Developed with C, C++, Go lang, PHP, Thrift, ProtocolBuffer, etc.

### Oak Pacific Interactive

SENIOR SOFTWARE ENGINEER

*Beijing, China*

*Jul. 2009 - Aug. 2010*

- Developed a vertical search engine of the SNS website <http://renren.com>, including distributed indexing, distributed searching, ranking system (weighted ranking and two dimensions ranking).
- Managed a server cluster across 60+ servers to run our search engine which processed over 40 million requests per day.
- Led a team of 5 engineers.
- Developed with C++, Java and the RPC framework Zeroc ICE.

## Width Technologies

TECHNICAL DIRECTOR & CO-FOUNDER

Beijing, China

Apr. 2007 - Jul. 2009

- Held responsibility for the strategic direction and leadership of the enterprise architecture.
- Led a team of 7 engineers to design and implement an Internet storage website (like MegaUpload) which served 1 million visitors per day and 4 terabytes traffic (upload & download) per day.
- Developed a HTTP server optimized for data uploading, downloading and traffic control.
- Managed all servers in multiple data centers with different Internet service provider.

## Kuxun Technologies

SENIOR SOFTWARE ENGINEER

Beijing, China

Jul. 2006 - Apr. 2007

- Developed a cache server as a front-end for a cluster of search engine. The cache server is applicable to cache the static content, fetch, merge and cache the searching results. The cache cluster served a load of 2 million visits in the peak hour.
- Developed a classic inverted-index searching engine, each of which could support 300 requests per second.

## AscentVision

SOFTWARE ENGINEER

Tianjin, China

Nov. 2004, - Jul. 2006

- Developed Linux kernel modules to identify various application-layer network protocols (MSN, torrent, emule, Skype, etc) to control their traffic.
- Developed Linux kernel modules to provide a network tunnel supporting real-time data compression.

## Awards

2016	<b>Scholarship</b> , For the assistance of research and teaching	UQAC
2015	<b>Scholarship</b> , For the assistance of research	UQAC
2014	<b>Scholarship</b> , For the assistance of research	UQAC

## Publication

### Offline Evaluation of LTL Formulæ with Bitmap Manipulations

16th International Conference  
on Runtime Verification

FIRST AUTHOR

Apr. 23, 2016 (under review)

### Real-Time Streaming Communication With Optical Codes

IEEE Access

FIRST AUTHOR

Jan. 4, 2016

## Skills

**Software Design:** Strong experience in software system implementation with C, C++, Java, Go Lang, Python.

**Distributed computing:** Familiar with Hadoop, Hive, Linux Container Group, Docker.

**Virtualization:** Familiar with Xen, XenServer, CloudStack.

**Web:** Familiar with both front-end and back-end design, PHP, JavaScript(JQuery), and also PHP module (in C).

**Database:** Hands-on experience in MySQL database structure design/profile/optimization, loadbalancing and caching optimization for Internet websites.

**Languages:** Fluent in Mandarin, English, French.

## Interests

Programming, Reading, TV Games, Music, Football, Swimming.