

# **ZHIZHEN FAN**

Santa Clara, CA 95051

[andyfanzz@gmail.com](mailto:andyfanzz@gmail.com)

(267) 432-1723

## **SUMMARY:**

Passionate and proactive programmer looking for a full-time developer position, with solid foundation in data structures, algorithms, design patterns and software design.

## **SKILLS:**

- Expert knowledge of developing and debugging C/C++
- Expert knowledge of **TCP/IP** and **Networking Fundamentals**
- Extensive experience in **Multi-Threaded** and **Multi-Process** programming
- Rich experience with **MYSQL** and **Berkley DB** Database
- Rich experience with library **STL**, **Boost**, **QT**, **ATL**
- Rich experience in developing **Backend Server Applications**
- Rich experience in **System Performance Optimization** and **Trouble-Shooting**
- Good knowledge of **HTTP**, **HTML**, **JavaScript**, **CSS**, **SOAP**
- Experience with **Distributed System** design and implementation
- Experience with **Linux Kernel Hacking**
- Experience with **SQL**, **Java**, **Shell-Script**
- Hands-on experience with **GCC**, **GDB**, **XCode**, **VIM**, **GIT**, **Tcpdump**, **Valgrind**
- Excellent **Linux/UNIX** skills

## **EDUCATION:**

Temple University, Philadelphia, PA, USA

M.S. in Computer Science, Jan 2014

Northwestern Polytechnical University, Xi'an, Shaanxi, China

B.E. in Software Engineering, July 2004

## **EXPERIENCE:**

SevOne Inc., Delaware, U.S.A

System Programmer Intern, May 2013 – August 2013

Renren Inc., Beijing, China

Staff Engineer, October 2011 – August 2012

StreamOcean Inc., Beijing, China

Staff Engineer, May 2009 - October 2011

Other software companies in Beijing, China

Software Engineer, July 2004 - May 2009

## **PROJECTS:**

**P2PHDFS-Peer to Peer Hadoop Distributed File System, 2013, Temple University**

P2PHDFS is a fully distributed Statistic Multiplexed Computing architecture implementation for the existing Hadoop File System (HDFS) to eliminate single point

failures and to obtain higher performance and reliability.

- Involved in protocols and modules design.
- Wrote Java applications to implement the tuple message-passing infrastructure.

#### **StreamSense-Server Driven Adaptive Streaming, 2011, StreamOcean Inc.**

StreamSense is a server application providing Server Side HTTP Smooth Streaming.

- Built a mathematical model estimating the traffic of TCP connections.
- Wrote algorithms in C to detect network congestion and proactively feed the best-bitrate stream to the client, with no network overhead.

#### **CCG-Cluster Content Gateway, 2011, StreamOcean Inc.**

CCG is a layer-7 load-balancer supporting content-aware scheduling.

- Performed core system design using Netfilter and Libipq supporting 400,000 concurrent users.
- Wrote kernel module in C to transfer TCP connections, manage sessions and perform session load balance scheduling.
- Wrote applications in C++ to perform content management.

#### **AWARDS:**

- Best employee of the year, 2011, StreamOcean Inc.
- First-class integrated scholarship, 2001, Northwestern Polytechnical University
- Second-class integrated scholarship, 2002, Northwestern Polytechnical University