# Leiyu Zhao

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#### **EDUCATION**

### Carnegie Mellon University, School of Computer Science

Aug. 2016 to Dec. 2017

Master of Computational Data Science (MCDS, formerly VLIS) - Systems Track

Relevant Courses: Intro. to Computer Systems, Cloud Computing, Distributed Systems, Storage Systems

Tsinghua University

*Aug.* 2012 to July 2016

Bachelor of Engineering (B.Eng.), Computer Software Engineering

Major GPA: 97/100 (4.00/4.00), ranking 1/63; Cumulative GPA: 94/100 (3.94/4.00), ranking 2/63

#### **EXPERIENCE**

#### Microsoft Operating Systems Group China (OSGC, ARD)

Mar. 2015 to July 2015

Software Developer Intern, C#/WPF/.NET/UWP

Developed built-in universal apps for Windows 10 Chinese Market Release, like Nearby Numbers

Developed non-built-in universal apps for Windows 10, like Microsoft How-old and Microsoft Couplet

Cloud Computing Group, Institute of Trustworthy Networks and Systems, Tsinghua June 2015 to July 2016

Research Assistant, Golang/Python/OpenStack/HDFS/Ceph

Deployed OpenStack Keystone, Swift and Nova on cluster to back up THU Cloud Computing Platform

Designed & implemented H2Cloud to provide cloud storage service

Submitted the paper Maintaining Filesystem in an Object Storage Cloud to IEEE INFOCOM'17 (currently pending)

# PROJECTS (SELECTED)

**H2Cloud** Sept. 2015 to Apr. 2016

Cloud storage system supporting full-fledged filesystem based on a single object storage cloud

Faster than OpenStack Swift in filesystem operations, while more reliable than Dropbox in filesystem storage

## **Gurgling (Web Framework for Golang)**

Oct. 2015 to Present

Light and configurable web framework with APIs similar to ExpressJS Full support for HTTP1.1, HTTPS, Websocket, Cookie, Session, *etc*.

#### Zijing Zhi Sheng (the Sound of Tsinghua)

Oct. 2014 to Jan. 2015

A web app to offer ticket booking service to all the stuff at Tsinghua, capable of handling 3K+ concurrent user requests More than 21,000 users. Sell tickets for tens of 2000-participant events (Up to Oct. 2015)

#### **Graphical User Interface for UNIX**

Oct. 2014 to Feb. 2015

A graphic card driver, a USB-mouse driver and a Windows-like GUI for UNIX kernel Set of syscalls for GUI manipulation and interaction

#### **Television Audience Analytics Web Service**

Oct. 2015 to Jan. 2016

Web application using Apache Spark, HDFS and Flask to provide real-time, fine-grained analytics on television audience Based on ~1 billion pieces of system logging of all the television sets in Tianjin Province, China

### Js2Jv (ANTLR-based Javascript Interpreter)

*May 2015 to July 2015* 

Full-featured Javascript runtime in JVM supporting asynchronous functions, closure, etc. with ECMAScript 3 analyzer

#### **SKILLS**

**Programming Languages:** *Proficient in* C/Javascript/Golang, *Familiar with* Java/C#/C++/Python/Haskell/Asm; **Algorithms & Data Structures**; **Cloud Computing:** OpenStack/AWS; **Distributed Systems:** MapReduce/Apache Spark; **Web Development:** HTML/CSS/Bootstrap/Nginx/ExpressJS/Flask/ASP.NET; **Database:** MySQL/MongoDB/SQL Server;

## **PUBLICATION**

### An Implementation of Distributed Filesystem Index and Collaborative Editing

Oct.2015

Leiyu Zhao, Zhenhua Li, He Xiao and Tong Zhu, 2016, Patent# CN105404653A

## **HONORS & AWARDS (SELECTED)**

#### Excellent Works Award, 2014 Intel Mobile Computing Innovation Contest

Oct. 2014

Designing a wearable computing device, using infrared camera to recognize gestures for interaction

## **Bronze Medal in National Olympiad in Informatics**

Aug. 2011

Top competition in algorithms & data structure in China

## Gold Medal in 5th Asia-Pacific Informatics Olympiad

May 2011

International competition in algorithms & data structure