

# Leiyu Zhao

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<https://academic.levy.at/en-us/>

<https://github.com/levythu>

## EDUCATION

### Carnegie Mellon University, School of Computer Science

Aug. 2016 to Dec. 2017

Master of Computational Data Science (MCDS, formerly VLIS) - Systems Track; Advisor: Garth Gibson

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

### Gurpling (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 staff 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

## 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