# Resume - Leiyu ZHAO

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#### **EDUCATION**

## **Tsinghua University**

Bachelor of Engineering (B.Eng.), Computer Software Engineering, 2012 - 2016

GPA: 94/100 (3.94/4.00), ranking 2/63
GPA in Jr.: 97/100 (4.00/4.00), ranking 1/63

## STANDARDIZED TEST

#### **GRE revised General Test**

• **332** (Verbal: **162**, Quantitative: **170**, AW: **3.0**)

#### **TOEFL iBT**

• 108 (Reading: 30, Listening: 27, Speaking: 24, Writing: 27)

## INDUSTRY EXPERIENCE

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

Software Developer Intern, March 2015 – July 2015

- Assisted developing built-in universal apps for Windows 10, like Nearby Numbers, which is assembled in the Windows 10 Chinese Market Release
- Developed non-built-in universal apps for Windows 10, like Microsoft How-old and Microsoft Couplet

## RESEARCH EXPERIENCE

## Institute of Trustworthy Networks and Systems, Tsinghua University

Research Assistant at Cloud Computing Group, June 2015 – Present

- Assisted developing THUCloud Storage experimental platform
- Designed an experimental algorithm to grant robust distributed file system and asynchronous atomic operations for Openstack Swift
- Submitted the patent application An Implementation of Distributed Filesystem Index and Collaborative Edit

## **HONORS & AWARDS**

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

October 2014, held in Shanghai, China

## "12.9" Scholarship, Tsinghua University

October 2015, highest honor in the grade

## Scholarship for Academic Excellence, Tsinghua University

December 2014, Sponsored by Beijing Lexiaoyao Company

## Scholarship for Overall Excellence, Tsinghua University

December 2013, Sponsored by Mr.Zhang Mingwei

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

August 2011, held in Changchun, China

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

May 2011, held in Beijing, China

# PERSONAL PROJECTS

## Zijing Zhi Sheng (the Sound of Tsinghua)

Developed from October 2014 to January 2015

- A released product, an interaction platform based on Wechat offering ticket booking and information service to all the stuff at Tsinghua
- Users more than 21,000 people. Distributed tickets to several 2000-participants events

## **Rousey Wristband Mouse**

Developed from March 2014 to Present

- A wristband-like device which takes advantage of infrared camera and recognizes gestures to provide an invisible mouse as an input to PC/Tablet/Ultrabook to combine accuracy with portability
- Highly commented by engineers from Intel, thus winning Excellent Works in Intel Mobile Computing Innovation Contest

## **Graph User Interface for UNIX**

Developed from October 2014 to February 2015

- A Graphic card driver, a USB-mouse driver and a Windows-like GUI for UNIX kernel
- A set of syscalls for GUI manipulation and interaction.

## Js2Jv (Javascript-to-Java Translator, Javascript Interpreter)

Developed from May 2015 to July 2015

- An all-round runtime for Javascript to translate JS codes directly into Java
- Works as a simple JS interpreter assembled with ANTLR

## Wireless Sensor Network Based on ZigBee

Developed from October 2014 to December 2015

- An ad-hoc cluster consisting of self-made nodes to collect data from distributed sensors for analysis
- With data loss rate lower than 2%

## **Annotation Module for Smartdental**

Developed from September 2014 to December 2014

• Smartdental is a product developed by Tsinghua University School of Software and Peking University School of Stomatology. Annotation module is an addition supporting manuscript annotations on the pathological pictures, which is under further review before release

## **Paper Recommendation System**

Developed from April 2014 to June 2014

- Works on an academic paper database to recommend contents to potential readers
- Uses hybrid algorithm (combining collaborative filtering and Tf-ldf) and dynamic estimation. The recommendation accuracy is estimated to be more than 71% (AP@5)

#### **Panorama Photostitch**

Developed from July 2013 to September 2013

- Stitches several related photos to one panorama
- Matches SURF vector of images using k-d tree, calculates transforming matrices and finds optimum stitch using minimal-cut algorithm

## **Image Search**

Developed from February 2014 to May 2014

• Indexes images based on SIFT and uses R-Tree for fast search

## **SKILLS & EXPERTISE**

- Debugging Skills and Coding Languages (C/C++/Javascript/Go/Python/Haskell/Java/C#/Pascal)
- Algorithm and Data Structure
- Linux
- Website Development (HTML/Frontend/Backend)