

# Zijian Chen

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## EDUCATION

**School of Software, Tsinghua University**, Beijing, China

- Bachelor of Science in **Computer Software Engineering**
  - Overall GPA: 92 / 100, Major GPA: 95 / 100, Rank: 1 / 57

Aug 2013 – Jul 2017 (expected)

## RESEARCH & PROFESSIONAL EXPERIENCE

**System Group**, Microsoft Research Asia

- Research Intern, System Group Oct 2016 – Present
  - Project: Cutting the Cord of VR Headset
  - Advisor: **Yunxin Liu**, Lead Researcher at Microsoft Research Asia
  - Completed a program which can extract the rendering frames of games and send them to a remote Desktop
  - Applied a GPU JPEG algorithm to the program with a compression ratio of 10:1 but only 2ms latency

**Robert Mehrabian Collaborative Innovation Center**, Carnegie Mellon University

- Research Intern, Electrical and Computer Engineering Department Jul 2016 – Sep 2016
  - Project: Using WiFi Signal to Detect the Position and Material of Obstacles
  - Advisor: **Swarun Kumar**, Assistant Professor at ECE Department, Carnegie Mellon University
  - Resolved Carrier Frequency Offset to obtain real Channel State Information
  - Implemented *SpotFi* algorithm to obtain positions of obstacles
  - Designed a feature to classify different materials and implemented an algorithm to extract the feature

**Department of Marketing and Sales**, Sogou Company

- Software Engineering Intern, Hetang Group Aug 2015 – Sep 2015
  - Project: An app based on Wechat platform
  - Contributed to the development of a social app for college students in Beijing on Wechat platform
  - Designed the database and developed most of the back-end of the application

## SELECTED PROJECTS

- A Machine Learning Approach for Table Splitting May 2016 – Jun 2016
  - Implemented *TANE* algorithm to discover functional dependencies
  - Contributed to an algorithm using functional dependencies and machine learning approach to split large tables for better performance
- Virtual Memory in Xv6 Dec 2015 – Jan 2016
  - Implemented virtual memory in Xv6 Operating System
  - Implemented the page fault handling function and the FIFO page replacement algorithm
- Real-time Environmental Sensing System Dec 2015
  - Developed a program on TinyOS to control sensors to collect environmental data
  - Designed and implemented a protocol like Go-Back-N to ensure reliable data transfer
- An FTP Server and Client Nov 2015
  - Implemented an FTP server and client according to RFC 959 standard in C
  - Won Best Project Award in Architecture of Computer and Network
- An Artificial Intelligence for a game Apr 2014 – May 2014
  - Designed and implemented an AI which controls a group of five heroes to battle with another group of heroes
  - Ranked top 12 among 190 participants and won an award in the 18th AI Programming Contest

## LEADERSHIP EXPERIENCE

**Student Association for Science and Technology, School of Software**, Tsinghua University

- Vice President May 2015 – May 2016
  - Participated in the organization of the 20th Artificial Intelligence Programming Contest
  - Led the online advertising group and propagandized the contest to college students in Beijing

## AWARDS & SCHOLARSHIPS

- National Scholarship (1.8%) Oct 2016
  - The Ministry of Education of the People's Republic of China
- Best Project Award in Architecture of Computer and Network Dec 2015
  - Prof. Yunhao Liu and Prof. Zheng Yang
- Changhong Scholarship (3.3%) Oct 2015
  - Tsinghua University
- National Scholarship (1.8%) Oct 2014
  - The Ministry of Education of the People's Republic of China
- Merit Award in the 18th Artificial Intelligence Programming Contest (6.3%) May 2014
  - Student Association for Science and Technology, Computer Science, Tsinghua University