# Jiakun Yan

Shanghai Jiao Tong University, No.800 Dongchuan Road, Shanghai 200240, China

☐ 510-827-0895 • ☑ JiakunYan1998@gmail.com • ④ jiakunyan.github.io

## **Education**

### Shanghai Jiao Tong University

Shanghai, China

o Junior undergraduate, Dept. of Computer Science.

Sep. 2016 - Present

- o Zhiyuan Honors Program of Engineering (an elite program for top 5% talented students)
- o Major GPA: 91.7 | Ranking: 4<sup>nd</sup>/148.

### University of California, Berkeley

California, USA

o Exchanging student, Berkeley Global Access Discover Program.

Jan. 2019 - Present

# **Research Interests**

Due to the process of exploring my interest, I have a cross background in parallel computing, computer network, and artificial intelligence. My current research interest lies in:

- o Parallel Computing
- o Distributed System

More broadly, I am interested in developing parallel algorithms and building fascinating system to make life easier and happier.

### **Patent**

o **Jiakun Yan**, Jingzhu Shao, Zhen Huang, Yanzhou Xiang, Yutong Liao, Ruohan Hu, Jin Qi, Shuo Jiang, "A vibrating alarm clock based on pressure sensors", Utility model ZL 2017 2 1300094.X, China

# **Research Experiences & Project**

### **Berkeley Container Library in Rust**

**UC Berkeley** 

UC Berkeley CS267, graduate level course project

Jan. 2019 - present

- o The Berkeley Container Library(BCL) is a distributed data structure library based on remote memory access written in C++.
- o We are implementing BCL in Rust, and trying to provide some safety guarantees to BCL using Rust.

### High-speed parallel transmission system with Cellular and wifi hotspot

SJTU

Advised by Prof. Linghe Kong

Oct. 2018 - Jan. 2019

- o In this system, a host phone opens its Wi-Fi hotpot and connects several relay phone. Then it delivers its data to relay phones by wifi-hotspot and they transmit data parallelly with Cellular network.
- o I wrote a MIMD(Multiple Instruction Stream Multiple Data Stream) program in Java language to handle multiple network interfaces and implement the system on Android platform by myself.

#### PPT Ctrl: an interactive PPT control APP

SJTU

Competition Project

Sep. 2018 - Dec. 2018

- o Control PPT by a smart phone APP in an interactive way. Enable page switching, highlighting, magnifying, and drawing. Enable real time computer screen display on phone.
- o Implement the system from scratch in a team of four students as the team leader. The system is based on Qt and Android platform.
- o Participating in Shanghai University Student Computer Application Ability Competition, 2019.

### Video clip retrieval by nature language

SJTU

Advised by Prof. Yi Xu

Apr. 2018 - Oct. 2018

- o Goal: Given a video and a query sentence, find the clip in the video described by the sentence.
- o Propose a spatio-textual coattention network to establish the interactions between words and spatial regions.
- o Evaluated on DiDeMo dataset, and outperforms state-of-the-art methods by a significant margin on both Rank@1 and Rank@5.
- o Submitted to ICCV 2019, the second author.

# **Honors and Awards**

o Fan Hsu-chi Scholars Awarded to about 10 students in SJTU every year.

2018

- 2018 Mathematical Contest in Modeling Meritorious Winner Awarded to top 14.5% participants.
  2018
- National Scholarship Highest honor for undergraduates in China, awarded to top 0.2% students.
  2017