# MINGRUI ZHANG

z1m6r3@gmail.com | (+86)13021256314 | drustz.com | Github: DrustZ

# **EDUCATION**

# **Bachelor of Engineering in Computer Science and Technology**

2013 - 2017(expected)

Department of Computer Science and Technology, Tsinghua university GPA 90.5 (Top 20%) Minor in Journalism

# **EXPERIENCE & PROJECTS**

PAROCAM IOS APP @Chestnut Tech Inc. www.parocam.com

2014/11/1 - 2016/1

A funny iOS app transforming images of human faces (such as stretching the mouth) in real time, using face-detection technologies, multithread and GPU. iOS developer and founder of start-up. Developed functions of Chat Bubbles, Video Merge. 10,000 downloads in App Store (with overall rating 4+). Find us by searching "Parocam".

# AIR-TYPING TECH HCI lab @Tsinghua University

2014/11 - 2015/7

Technology of typing in the air. Leap Motion tracing fingers and detecting peaks of waveforms. Using QWERTY layout, language model and patter matching. Our paper is accepted by UIST'2015 (ATK: Enabling Ten-Finger Freehand Typing in Air Based On 3D Hand Tracking Data).

During the research, I explored multiple devices and different SDKs, assessed algorithms of Finger-Tracking, and tried different ways to smooth the waveform such as Kalman Filter.

**IMAGENET CONTEST** Multi-Media Lab @The Chinese University of Hong Kong 2015/7 - 2015/9 ImageNet is a famous contest of object detection. Did research on machine learning, especially on object detection as a research assistant. Developed the CXXNET (a framework of deep learning) and revised the convolutional layer of it.

#### **VOICE++** DIGITAL DESIGN PROJECT

2015/5/20 - 2015/6/13

A hardware project that can recognize voiceprint and speaker. Recognizing algorithm(MFCC) in Verilog. WM8731 Chip Programming, Audio receiving and Voice vector matching Algorithm. Accuracy: 90% in two people, 75% in three people. A demo on YouTube is available (search VOICE++).

# DAN9 @STUDENT FESTIVAL OF TSINGHUA

2014/07 - 2015/04

Bullet Screen (dan mu) development for the Festival of Student of CST.

Built a server of Wechat public account, using PHP to connect to our address book system.

### **LEAP TOUCH** @Hackthon HackShanghai

2015/11/07-2015/11/08

**TOP4 BEST PROJECTS** 

Interact with real objects in life with Leapmotion sensoring the hand data. We demonstrated a scene customer can touch on showcase to get information of the commodity. Leading developer.

# PEBBLE MARIO @Hackthon THack

2014/10/1 - 2014/10/2

BEST WATCH APP AWARD.

Control a Mario game on PC with PEBBLE(a smart watch) through it's gyroscope and accelerator sensor together with HTTP protocol. Built a server using Django.

## **OTHER PROJECTS**

WordMemo --- a tool to memorize words | JunQi --- a Jun Qi game | DrRayTracer --- a ray-tracing project.