# Kaiwen Sun

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# WORK EXPERIENCE

#### Whitepages Inc., Senior Software Engineer

Seattle, Apr. 2017 – Present

- Full-stack development of Whitepages websites:
  - www.whitepages.com/tenant-screening, premium.whitepages.com, www.whitepages.com
- Project examples (percentages of my contribution in parentheses):
- Led the development of a completely new website www.whitepages.com/tenant-screening. (70%)
- Upgraded Premium codebase from Python2 to Python3 and upgraded Python modules (70%)
- Refactored user account authentication mechanism of *Premium* (90%)
- Developed a person name aliases cleaner/deduplicator (100%)
- Designed and implemented RESTful APIs and services.
- Built the frontend of *SmartCheck*, a webpage of person background report (60%)
- Integrated the map system on the two Whitepages websites using Mapbox (100%)
- Completed daily work of frontend and backend in an Agile manner
- Hackathon project 1: Voicepages, an Amazon Alexa skill to query addresses' and phone number owners' information (50%)
- Hackathon project 2: Whitepages coupon system and referral system (25%)
- Tech skills: Python2&3, Flask, Jinja2, Redis, VanillaJS(ES6) & jQuery, Sass, Node.js, Webpack. Have some good understanding of Flask and some widely used Flask modules (eg. flask-wtf, flask-login)

#### **HyperFD Ltd., Software Engineer & Co-founder** http://www.hyperfd.com

China, June 2016 – Sept. 2016

- The only one software programmer in this start-up. One of three co-founders.
- UAV Camera Head
  - The program running on a Raspberry Pi controls a Sony camera, a webcam and servo motors which are loaded under a UAV
  - The captured images are processed using OpenCV in real time to automatically tracks user-selected objects
  - Based on this project, HyperFD Ltd. was formally founded and registerd in Apr. 2017 in China.
- Livestream Backhaul: A remote monitor & control system for multiple users in LAN and WAN.
- Tech skills: Java, OpenCV, multithreading, Python, Raspberry Pi, some APIs controlling hardware.

# **EDUCATION**

#### University of California, San Diego

Sept. 2015 – Mar. 2017

• M.S. in Computer Science GPA: 3.835 / 4.0

# **Nanjing University**

**Sept. 2011 – July 2015** 

• B.S. in Computer Science and Technology GPA: 88.3%

• Ranking: 1/20 (National Elite Program Class, 20 students selected from 200)

#### University of Waterloo

Sept. 2014 – Apr. 2015

• Exchange student in Computer Science GPA: 3.9 / 4.0

• Undergraduate Research Assistant, testing performance of revised Apache Spark

#### TECH SKILLS

Programming languages: Python 2&3, Java, C, C++, JavaScript (ES6, jQuery)

Others tech skills: Flask, multithread, network, Git, HTML, Raspberry Pi, JIRA, Jenkins, Windows, Linux, macOS

## PERSONAL PROJECTS

#### **Online Chinese Chess**

Oct. - Dec., 2018

- Built a responsive web application for multiple users to play Chinese Chess against each other online
- Backend: Python3, Flask (Jinja2, wtforms, flask-login, etc.), Redis
- Frontend: HTML, CSS, jQuery, AJAX, BootStrap, BootBox.

## **Stock Auto-trader**

Dec., 2018

Traded stocks using Robinhood API with customized and configurable trading strategies

# **Distributed File System**

2016

- Used self-implemented general-purpose Java RMI library for remote process communication
- Java skills include dynamic proxy, reflection, and multithreads synchronized by read/write lock

## **Remote Shell Controller**

2016

- Built an integration of multithread remote terminals like SSH, but has features catering my personal usage.
- Swapped client's and server's roles, so that controller can access to computers hidden behind NAT.

#### Virtual Machine Management Cloud

Funded by Nanjing Univ. Innovation Program, 2014

• Led a four-member team to design and implement a VM cloud based on KVM.