# Kaiwen Sun

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Work Experience

## Whitepages Inc., Software Engineer II

Seattle, Apr. 2017 - present

**Full-stack development** of Whitepages webs www.whitepages.com and premium.whitepages.com.

**Built some new features** from scratch, including (contribution percentages in parentheses):

- Upgrade *Premium* codebase from Python2 to Python3 and upgrade Python modules (70%)
- Refactor user account authentication mechanism of Premium (90%)
- Person name aliases cleaner/deduplicator (100%)
- Some core RESTful APIs and services
- The frontend of SmartCheck, a newly themed webpage of person background report (60%)
- The map system on the two Whitepages websites using Mapbox (100%)
- Iterative development new front-end and back-end features to provide customers with better experience and services, and to provide marketing team with data for decision making

An unreleased website. New business, new product. Still in progress. (70%)

**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%)

**Primary tech skills used:** Python2&3, Flask, Jinja2, Redis, VanillaJS(ES6) & jQuery, Bootstrap, NodeJS, Webpacker. Having deep understanding in Flask and some widely used Flask modules (eg. flask-wtf, flask-login)

## HyperFD Ltd., Software Engineer & Co-founder

China, June 2016 - Sept. 2016

The only one software programmer in this start-up. One of three co-founders.

**UAV Camera Head:** A program on Raspberry Pi processing images and controlling a Sony camera, a webcam and servo motors, loaded under a UAV, so that the UAV automatically tracks user-selected objects. Based on this project, HyperFD Ltd. was formally founded and registerd in Apr. 2017 in China. (http://www.hyperfd.com)

**Livestream Backhaul:** A remote monitor & control system for multiple users in LAN and WAN. **Skills Used:** Java, OpenCV, multithreading, Python, Raspberry Pi, some APIs controlling hardware.

### Education

## University of California, San Diego

Sept. 2015 - Mar. 2017

M.S. student 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 Spar

# **Programming Languages & Technical Skills**

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

Others tech skills: Flask, Multithreading, Network, git, HTML, Raspberry Pi. Windows, Linux, macOS.

## Some School and Personal Projects

#### **Online Chinese Chess**

Personal project, Oct. - Dec., 2018

- A 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.
- Targeting on opening to public users, it is a gift to my friend :)

#### Stock auto-trader

Personal project, Dec., 2018

- Using customized and configurable trading strategies to trade stocks using Robinhood API

#### Distributed File System

Scool project, 2016

- Use 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**

Personal project, 2016

- An integration of multiprogramming remote terminals like SSH, but has features catering my personal usage.
  - Client's and server's roles are swapped, 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.