Kaiwen Sun

Phone: (858) 336-6271   **GitHub:** https://github.com/kaiwensun
Email: skwkevin836@gmail.com   **Homepage:** http://sites.google.com/site/kwtestkw

Work Experience

Whitepages Inc., Software Engineer II   **Seattle, Apr. 2017 – present**

Full-stack development of Whitepages Premium website premium.whitepages.com .

Built some new functionalities from scratch, including RESTful APIs of products and a new themed webpage of person background report.

Iteratively developed 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.

Primary tech skills used: Python, Flask, Jinja2, jQuery, Bootstrap, git

Hackathon: Led a team of one PM and 4 programmers to build Voicepages, an Amazon Alexa skill to query phone numbers' and addresses' information.

Beijing Hengneng Tech. Ltd., Software Engineer Intern   **China, June 2016 – Sept. 2016**

The only one software programmer in this start-up

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, a start-up company, Chao-Jing-Shen, has been established in Apr. 2017.

Livestream Backhaul: A remote monitor & control system for multiple users in LAN and WAN.

Skills Used: Java, OpenCV, multithreading, Python, Raspberry Pi and some APIs controlling hardware.

Education Experience

University of California, San Diego   **Sept. 2015 – Mar. 2017**

M.S. student in Computer Science
GPA: 3.888 / 4.0

Nanjing University   **Sept. 2011 – July 2015**

B.S. in Computer Science and Technology
Ranking: 1/20 (National Elite Program Class, 20 students selected from 200)
GPA: 88.3%

University of Waterloo   **Sept. 2014 – Apr. 2015**

Exchange student in Computer Science
Undergraduate Research Assistant, testing performance of revised Apache Spark
GPA: 3.9 / 4.0

Programming Languages & Technical Skills

Programming Languages for work: Java, Python, C, C++, MATLAB, JavaScript

Others Skills: Multithread programming, Network programming, vim, git, HTML, BootStrap, jQuery, Visual Studio, Eclipse, Apache Spark (PySpark), Berkeley Caffe, Verilog, LaTex, Wireshark, Docker, OpenCV(Java), Raspberry Pi

Some School and Personal Projects

Online Chinese Chess   (personal project, in progress, 2017)

- A Web application for multiple users to play Chinese Chess against each other online.
- Backend: RESTful APIs implemented with Java, Jersey and Maven.
- Frontend: HTML, CSS, jQuery, AJAX, BootStrap, BootBox.

Distributed File System   (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 and server's roles are swapped, so that controller can access to computers hidden behind NAT router.

Virtual Machine Management Cloud   (2014, funding from Nanjing Univ. Innovation Program)

- Led a four-member team to design and implement a VM cloud, through which users can create, use, migrate and delete personalized operating system running on distant servers. Coded mainly in C.

Some Neural Network Projects   (2016)

- A multi-layer neural network trained by back-propagation to learn and test on the MNIST Dataset.
- A convolutional neural network, using Berkeley Caffe and AWS, to train and test on the CIFAR-100 Dataset.
- A face verification program using DeepID proposed by CUHK scholars. Convolutional network and Siamese network are used.

Simplified Unix-like Operating System   (2014)

- Built and coded operating system with I/O, process switching, file system, memory allocation features.