Kaizhao Zhang

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Skills

- **Programming Language**: Familiar with Python. Learn about other languages C, Java, JavaScript, Ruby, Go, Rust, and more.

- **Network Protocol**: Familiar with the common parts of HTTP/1.1.

- **Front-end development**: Familiar with HTML/XHTML, CSS, Ajax, etc. Learn about SASS, Node.js and more.

- **Back-end development**: Familiar with Python frameworks/servers such as Django, Flask, Tornado, aiohttp, Gunicorn. Familiar with the WSGI protocol. Learn about servers/containers like uWSGI, Uvicorn, and more. Learn about the ASGI protocol. Familiar with the Python language standard library and most common third-party libraries such as ORM SQLAlchemy, task queue Celery, and more. Learn about backend development frameworks and servers for other programming languages.

- **API Design**: RESTful practitioner. Learn about JSON Schema, Swagger/OpenAPI, and more.

- **Data Storage**: Familiar with databases such as SQLite, Redis, Cassandra. Learn about databases such as MySQL/MariaDB, PostgreSQL, MongoDB.

- **Message Queue**: Learn about AMQP/RabbitMQ, Redis' pubsub feature.

- **Server**: Familiar with Apache, nginx, etc. Learn about lighttpd, haproxy, etc.

- **System Design**: Familiar with MVC software design, decoding service dependencies through message queues, and different implementations using plug-in mechanisms. Learn about microservices.

- **Development Environment**: Familiar with GNU/Linux (Debian/Ubuntu, Fedora, Arch Linux, Gentoo, etc.) and FreeBSD.

- **Development Tools**: Familiar with Git, Vim, various UNIX gadgets, etc. Familiar with the Supervisor process management system. Learn about Docker container virtualization technology.

- **Cloud Platform**: Familiar with Google AppEngine (Python). Learn about AWS EC2/CloudWatch and more.

- **Development Management**: Familiar with agile development (Scrum), continuous integration (TeamCity), code review (Gerrit, git-review), etc.

Experience

Software Development Engineer at Intel China Inc.

February 2016 to April 2017. Shenzhen, Guangdong, China

Working as back-end developer/leader of Safe Family project (see project description below).

Technical stack: Python, Tornado, Cassandra, etc.

Software Development Engineer at Guangzhou Qilekang Inc.

May 2015 to October 2015. Guangzhou, Guangdong, China

As part of development of the Guangzhou Electronic Business platform, working as a developer and the consultant of the Python development team. There were some small projects taken and finished by me and my fellows. And the most important project I joined was the Medicine Assistant sub-project of Dabai project.

Technical stack: Python, Django, Celery, Whoosh, etc.

Senior Software Development Engineer at Guangdong Caihui Inc.

June 2014 to January 2015. Guangzhou, Guangdong, China

Working on the development of Cailetou project (see project description below).

Software Development Engineer at Guangzhou Yuanyun Inc.

May 2011 to January 2014

Location: Guangzhou, Guangdong, China

Working on:

- Development of Syncbox project including its web server, client for Linux and DDNS server and client (see project description below).

- Development of WIT-FII project including architecture and implementation of its Router Hub server and PC client (see project description below).

Software Development Engineer at Guangzhou Wangrong Inc.

May 2010 to May 2011. Guangzhou, Guangdong, China

Working on:

- Development of the auto-update back-end server and client which bases on Google Omaha.

- Prototype development of server and client of file sync project.

- Technical research and prototype development of Certification Union project which bases on OpenID and OAuth.

- Deployment and management of development and testing servers and project management server.

Technical stack: Python, Tornado, MongoDB, Java, Tomcat, etc.

Developer at Shanghai Zopen Inc.

September 2008 to December 2009. Guangzhou, Guangdong, China
Working on:

- Development of EveryDo products.

- Deployment and operation of products.

Technical stack: Python, Zope 3, etc.

Mechanical Engineer at Shantou Goworld Display Inc.

April 2006 to July 2008
Location: Shantou, Guangdong, China
Working on:

- Maintaining and repairing production equipment.

- Designing and fixing equipment kits and fixtures, etc.

Design technical stack: AuthCAD and SolidWorks.

Project

Personal projects

Since 2008.

- **repos**: Local repositories management tool. Technology stack: Rust.

- **gnome-shell-extension-tray-icons**: GNOME shell extension - Tray icons. Technology stack: GNOME Shell, JavaScript.

- **supportbot**: A simple Q&A helper library based on fuzzy matching and full-text indexing. Technology stack: Python, fuzzywuzzy, jieba, Whoosh.

- **AUR packages**: Pack some nice new software programs for Arch Linux. Technology stack: Arch Linux, Bash, etc.

- **sfss**: A large number of small file storage services, based on Douban open source Beasdb project. Technology stack: Python, Beansdb.

- **magicoding**: A naive blog based on tornado appengine demo and running on Google AppEngine. Technology stack: Python, Tornado, Markdown, Google AppEngine, etc.

More personal projects and details can be found on the personal website and the GitHub repositories (see link below).

Safe Family at Intel China Inc.

March 2016 to March 2017.

Description: A cross-platform home device protection system that supports Android, iOS, and Windows platforms. Features include: application availability control; web page URL access control (Android and Windows platforms only); device time-of-day control (Android and iOS platforms only); electronic map fence settings (Android and iOS platforms only); new Instant notification and instant response control of application, access to webpage URL, device usage time; timely reporting of device address changes and timely notification of device access to electronic map fence; activity history and review; device location tracking in time.

Working as back-end developer/leader (back-end named CloudServices).

Note: For more details on the project, please refer to the additional content, as well as the official website of the project and the client description of each platform (see the link below).

Technical stack:

- Back-end technical stack: Python, Tornado, Cassandra, nginx, Supervisor, Ubuntu Server, etc.

Annual assessment

November 2015 to January 2016.

Description: Outsourcing project. Small Django project. The internal system of a institution provides the democratic evaluation function for the incumbents participating in the annual assessment. It distinguishes the general employees, middle-level cadres and members of the leadership team, and participates in the annual assessment and does not participate in the assessment. The admin management provides the annual assessment content, the assessment team, and the score calculation, assessment rating and assessment archives. At the end of the annual assessment it provides publicity announcement of the evaluation results. Finally, the admin operation documentation and deployment documentation are provided.

Technology stack: Python, Django, Gunicorn, MySQL, Ubuntu Server, nginx, bootstrap, jQuery, SASS, etc.

Cailetou at Guangdong Caihui Inc.

June 2014 to January 2015.

Description: Internet lottery purchasing system. Medium-sized Flask project system. Provide online shopping service for lottery and lottery for general Internet users, support for DALETOU and SHUANGSEQIU, integrated online support function and interface with a lottery purchase and ticketing. The system is divided into two parts, each of which is a separate Python/Flask project/server. One of them provides website functions for general users and another for admin management. Users can register, log in, recharge, place an order, pay, inquire about winning or not, withdraw money, participate in online activities, etc. through the website. The website also provides information. admin management provides various functions such as report, recharge, redemption and refund.

Working on the development.

- Adding new features including virtual money, online event, etc.

- Improving features including withdrawal, order, payment, ticketing, back-end management functions, etc.

- Fixing system security issues and improving structure and quality of source code.

Technical stack: Python, Flask, SQLAlchemy, etc.

WIT-FII at Guangzhou Yuanyun Inc.

June 2013 to January 2014.

Description: Router Hub server of WIT-FII project. Features are API service for management of accounts and routers, etc., gateway service for routers, online store, etc.

Working on the whole architecture and implementation of the Router Hub server.

- API service for management of account and router, etc works well for iOS and Android client.

- The online store implemented the Payment API of Alipay. Users can buy products on the online store.

Technical stack:

- Router Hub server: Python, gevent, SQLAlchemy, Redis, etc.

Syncbox at Guangzhou Yuanyun Inc.

May 2011 to June 2013.

Description: Private file storage service for families. Features of web server are website for online browse and file operations, API service for mobile clients. The DDNS server provides Dynamic DNS service for every machine, which can connect to internet and has Syncbox servers running on it.

Working on:

- web server: Preview image, thumbnail and metadata generation for files including image, PDF, Office, audio, video, plain text, etc files. Recent files sync to Dropbox, Google Drive, SkyDrive, Jingshan Kuaipan and Kupan.

- DDNS server: Accepts IP address escalation from the client and is used to update the A record of DDNS.

Technical stack:

- web server: Python, Tornado, gevent, etc.

- DDNS server: Python, web.py, dnspython, gevent, MySQL, etc.

Education

Bachelor of Mechanical Engineering and Automation

September 2001 to July 2005, Bachelor of Engineering, South China University of Technology

Language

- English: English: College English Test Band 4 (CET-4, 2004-03)

- Chinese: Mandarin, Teochew dialect, Cantonese

Link

Personal

- Website: https://www.zhangkaizhao.com/

- GitHub: https://github.com/zhangkaizhao

- LinkedIn: https://www.linkedin.com/in/zhangkaizhao

Working

- Safe Family: http://family.mcafee.com/

- Cailetou: http://www.clt500.com/

- WIT-FII: https://www.witfii.com/index.html

- Syncbox: http://www.syncbox.cn/ and http://www.isyncbox.com/

- EveryDo: http://www.everydo.com/

- Guangzhou Qilekang Inc.: http://www.7lk.com/

- Guangzhou Wangrong Inc.: http://www.g4b.cn/

- Shantou Goworld Display Inc.: http://www.goworld-lcd.com/