

Qichao Zhang

Nanjing University Software Institute, 2010, Bachelor
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Technical Skills

Operating Systems	Ubuntu, ArchLinux, Gentoo, CentOS
Languages	C, Java, PHP, JavaScript, C++, Python, Bash
Softwares	Vim, Git, GDB, IntelliJ, Eclipse, Maven
Frameworks	jQuery, Yii, Backbone, Spring, Spring MVC

Experience

Microsoft STB SDET Shanghai

2013-7 to NOW

- Working at Payment department of Microsoft Commerce Platform, which provides the payment subsystem for Windows Azure and many other Microsoft services. My main job is to add some small features and write test cases for this system.
- During the internship, I wrote an website based on Windows Azure with the instructions of my mentor. This site is a open platform supplying many APIs for developers, just like an operating system on the web, and it's easy to build apps on it using the SDKs I wrote.

Jiangsu Zhongzheng InfoTech Ltd

2012-7-20 to 2012-12-20

- A entrepreneurial team, working on a platform website to serve NJU students, using PHP and Yii Framework.
- My job here mainly includes: designing the authentication for OAuth2.0 and supplying APIs for the open platform, besides some front-end development (using jQuery and Bootstrap).
- Here, I learned a lot about team cooperation and font-end to backend interaction.

Projects

UWS, A lightweight http web server

2012 - 2013

- Independent Project, developing with C language, aiming to build a high performance http server, it has similar configuration file with *nginx*.
- Implemented functions: custom error pages, 304 status , deflate and gzip compression, http basic authentication, url rewrite, simple reverse proxy and FastCGI support.
- Performance: under Ubuntu in a VMware instance having 512M memory, it can handle 7kqps of *apache benchmark* test in single process mode.
- To solve the memory leak problem, I wrote a memory pool named *usmem*, referring the design of Loki.
- I also write a demo site: <http://demo.lecoding.com>

DistMEM, A NoSQL database

2012 - 2013

- Independent Project, developing with C++. It provides simple APIs, like set, get and del.
- It provides simple APIs, like set, get and del. It has 4 data types: int, float, string and list, and string is binary safe.
- The data file implementation take the design of the FAT12 file system and it uses B-Tree as index structure, also I add LRU cache for better performance.
- The protocol of communicating refers the *Redis* specification, so it's cross-platformed, and I wrote a client console using Python.
- Besides, I developed a PHP extension named *php_distmem*(written in C) to supply access to distmem.

	NJU Wenji , A web site for literature lovers 2012 <ul style="list-style-type: none"> • Cooperative project, based on Yii Framework. It's a project I written with seniors, providing a site for NJU literature lovers. My job mainly includes: • Integrating with SNS and share with others using OAuth2.0 • Comment, includes post comments and display • A Markdown-like language interpreter, translating specific article format to HTML • A jQuery plugin of building a dropdown list in a textarea • Other trivial jobs like supplying RESTful APIs and building front-end interaction
	UPLEX , Python Lex interpreter 2012 <ul style="list-style-type: none"> • Independent project, A lex implementation using Python language, according to <i><Compilers></i>. • Regular expression engine is its core function, using the procedure NFA->DFA->mDFA, we can get a minimized DFA, it can deal with simple regexp. This program can read a *.l file and generate a runnable py file.
	Lily-PHP-SDK , NJU Lily BBS API Wrapper 2011 - 2012 <ul style="list-style-type: none"> • Independent project, develop with PHP. Lily BBS is too old to supply standard API, so I using curl to crawl the site and resolve useable APIs. Here are some sub-projects: • <i>Lily-ME</i>: A mobile site of Lily BBS using jQuery Mobile and Lily-PHP-SDK. • <i>Lily-Mobile</i>: This is an android app for Lily BBS, enhanced the bbs and using proxy to save network cost.
	Other projects 2011 - 2013 <ul style="list-style-type: none"> • Light blog, A blog app based on Yii Framework and jQuery • Remote whiteboard, based on Java and Swing, I am in charge of software architecture, audio transmission and message queue. • Some Python websites on <i>Google App Engine</i>, like blog, disk and notepad. view online • NJU-Courses-Select chrome plugin, using for grabbing hot courses.
Education	GPA 4.1/5.0 CET4 / CET6 617 / 546
Links	Blog: http://lecoding.com GitHub: https://github.com/usbuild Twitter: https://twitter.com/usbuild