Yuanxuan Wang

Curriculum Vitae

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Education

2010–Present	**MS in System Software, Supervisor: Haibo Chen**, *Software School, Fudan University*, expected 2013.
2006–2010	**BS in Software Engineering**, *Software School, Fudan University*.

Internship

2012	**Summer Analyst at Morgan Stanley**, *E-Trading Infrastructure Department*. Designed and implemented a BitTorrent based system to speed up trading data precache
2011	**Summer internship at EMC Research Shanghai**. Researched on I/O side channel attack in a share-host environment

Community

Blog	`blog.yxwang.me`, *My blog (Chinese)*.
Stack Overflow	`stackoverflow.com/users/111896/zellux`, *Reputation top 4%*.
GitHub	`github.com/zellux`.

Project Experience

2011–present	**Tangcha Project**, *iOS, Ruby on Rails*, Startup Project. Tangcha is a startup project, aimed at providing the best online Chinese ebook store for readers. I have been working as a part-time developer in Tangcha, and responsible for designing and implementing most functions of the back-end server, including purchasing interfaces for mobile phones and tablets, user authorization, transaction validation, third-party storage integration, synchronization service, dashboard for publishers and administrators, server configuration, and etc.
2011–2012	**ReDroid**, *Android*, Research Project. Working with Jinchen Han, Chen Tan, Prof. Haibo Chen and Prof. Binyu Zang. ReDroid is an event-centric record and replay framework that targets smartphone platforms. We ensure its replayability as well as low recording overhead by optimization techniques including fine-grained UI-event based recording, coarse-grained data based recording, intertwined replay, and system call interception to handle some low level undeterminism. I was the major contributor of this project and the paper has been submitted to ASPLOS '13.
2009–2011	**Cerberus**, *Xen, Linux Kernel*, Research Project. Working with Xiang Song, Rong Chen, Prof. Haibo Chen and Prof. Binyu Zang. Cerberus aims at improving application scalability on many-core in a backward-compatibility way. To mitigate contention on shared data structures within OS kernels, Cerberus clusters multiple commodity operating systems atop a VMM. It achieves up to 3.49x Apache httpd throughput compared to vanilla Linux on a 16-core machine.

2010	**ForceField**, *Python, ANTLR*, Independent Project.
	In collaboration with Menghua Xiao.
	We designed a scripting language named ForceField, and implemented an interpreter for it using Python and ANTLR. To simplify debugging ForceField scripts, we also developed an online debugging service, with features like single stepping and variable watching available through web interface.
2010	**AppFlight for Android**, *Android*, Startup Project.
	A user customizable application framework. Users define contents and layout style in a web CMS, we then render those contents on mobile applications.
2009	**Nexus**, *C, Assembly*, Independent Project.
	An exokernel-like operating system, based on MIT Course 6.828.
2009	**Reading Progress Tracker**, *Python, Django, Google App Engine*, Independent Project.
	A web application to help user track everyday reading progress. The reading list is synced with douban.com.
2008	**Koprulu**, *C, Assembly*, Course Project.
	A simple multi-tasking preemptive OS kernel, based on CMU 15-410 lab.
2008	**GPA Calculator for Fudan Students**, *Python, wxWidgets*, Independent Project.
	A desktop application which fetches and parses course grades from web pages, and calculates GPA based on parsing result. It had been downloaded over 6000 times in one year.

Publications

2012	**Yuanxuan Wang**, Jincheng Han, Haibo Chen, Binyu Zang, *ReDroid: Fast Malware Recovery on Smartphones with Intertwined Replay*, In IPADS Technique Report.
2011	Xiang Song, Haibo Chen, Rong Chen, **Yuanxuan Wang**, Binyu Zang, *A Case for Scaling Applications to Many-core Platforms with OS Clustering*, In 2011 ACM SIGOPS European Conference on Computer Systems (Eurosys'2011).

Awards

2012	**Most Creative Award of Morgan Stanley Summer Intern Team Project**.
2010	**First Prize in SAP Dashboard Competition 2010**.
2010	**First Prize in Cloud Computing in Shanda Campus Master Innovation Contest**.
2010	**First Grade Scholarship for Graduates**.
2007	**First Place in Zhangjiang Cup, Dota Allstars**.
2006, 2008	**Second Place in Fudan E-sports Game, Starcraft**.
2005, 2004	**First Prize in National Olympiad in Informatics in Provinces**.

Skills

Languages	**Ruby = C = Java > Python > C++**.
Kernels	**Linux, Xen, Android**.
English	**CET-6 593**, *fluent in spoken and written English, also a TED translator*.
Games	**Starcraft 2 (Master League)**.