RAY CHEN

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➢ **Expected: Summer Intern 2016   (Software Development)**

Education	**Master degree -- University of Michigan, Ann Arbor**	*Sep.2015 – Apr.2017*
	• Major in Computer Science	GPA: 3.3/4.0
	• Course: Operation System, Algorithm, Web database and Information Retrieval, etc.	
	Bachelor degree -- Wuhan University, China	*Sep.2011 – Jun.2015*
	• Major in Software Engineering	GPA: 3.75/4.0
	• Course: Data structure, Computer Network, Compiler, Database, Software Testing, etc.	

Experiences	**Internship** in Chinese Academy of Science(ICT), Beijing	*Jul.2014 – Jan.2015*
	• Built web system for Appwill ltd. to monitor the status of products, a well-known iOS app with over 6 million users and Draw various charts to analyze user activities and patterns.	
	• Executed **8 million records** per day, 2GB in size. Using **Python** and **MongoDB**.	

Projects	Search Engine **--** Information Retrieval	*Nov.2015 – Dec.2015*
	• Sort results based on two ranking factors: PageRank and Inverted Index. Built dataset over **Wikipedia** corpus, 316M in size.	
	• Applied Hadoop **Map-Reduce** framework to calculate the Inverted Index.	
	• Be capable of scaling to roughly the level of Google in 2004.	
	Operation System **--** Multi-threads & Virtual Memory Management	*Jan.2016 – Feb.2016*
	• Implemented user level threads library, CPU and monitors on Linux platform, including Mutex, Conditional Variables, supports **multiprocessors**. Using C++.	
	• Implemented a single thread external pager, which manages **virtual memory** for application processes. Supports address space creation, destruction, read and write fault. Using C++.	
	VR Chat **--** Hackathon project	*Feb.2016 – Feb.2016*
	• Defined a fancy way to chat with friends, by applying virtual reality, using Google Cardboard and Microsoft Kinect 2.	
	• Designed and implemented the server, reading data from Kinect 2 and maintaining the communication between server and players, using C# and finished project in 36 hours.	
	Photo Galleries **--** Web Development	*Sep.2015 – Oct.2015*
	• A web project about photo galleries. Supported multiple users and authority management. Users can view public albums, manage their own pictures and albums and share to friends.	
	• Backed by **Python Flask** framework and MySQL database.	
	Graduation Project **--** Data Warehouse	*Feb.2015 – Jun.2015*
	• Built data warehouse based on **Pentaho Kettle**, mainly merging the data from relational databases into NoSQL database. Real data from JinPai ltd., China. Using Java.	
	• Enhanced the project warehouse by integrating MongoDB-Delete plug-in. Applying source code from Kettle organization on Github.	

Honors & Awards	• **National Scholarship of China (2/91)**	*2013-2014*
	• Third prize of Lanqiao Algorithm Competition of China	*2014*
	• Excellent Youth Volunteer of Wuhan University	*2012-2013*

Skills & Interests	Advanced:	Java, Python, MongoDB, MySQL, Git.
	Basic:	C++, C#, JavaScript, jQuery, HTML, CSS.
	Interests:	Software Development, Volunteer work, Cycling, Photography, Basketball.