RAY CHEN

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- Expected: **Fulltime** April 2017 (Software Development)

Education

Master degree -- University of Michigan, Ann Arbor *Sep.2015 – Apr.2017*
- Major in Computer Science
- Course: Operation System, Algorithm, Web database and Information Retrieval, etc.

Bachelor degree -- Wuhan University, China *Sep.2011 – Jun.2015*
- Major in Software Engineering
- Course: Data structure, Computer Network, Compiler, Database, Software Testing, etc.

Experiences

Software Intern in Autodesk, Novi *Jun.2016 – Current*
- Developed API methods in C# and SQL to provide functionality on server sides, test on Autodesk data management platform -- Vault Professional.

Software Intern 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 virtualized data to analyze user activities and patterns.
- Executed **8 million records** per day, 2GB in size. Using **Python** and **MongoDB**.

Publication

Browsing Behaviors in Hedonic Content Systems: The More the Merrier? (IJCAI 2016, full pager)
- Ping Luo, Jiaxi Tang, Rui Chen, Zhongjie Yu.

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 virtual memory translator, which manages **virtual memory** for application processes, supports address space creation, destruction, memory read and write. 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 by TCP/UDP, using C#.

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** *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: Volunteer work, Cycling, Photography, Basketball, Running.