

# RAY CHEN

- [chenray@umich.edu](mailto:chenray@umich.edu) +1 586-393-9510 [github.com/whuchenrui](https://github.com/whuchenrui)  
➤ Expected: **Fulltime** April 2017 (Software Development)

<b>Education</b>	<b>Master degree</b> -- University of Michigan, Ann Arbor <i>Sep.2015 – Apr.2017</i> <ul style="list-style-type: none"><li>• Major in Computer Science</li><li>• Course: Operation System, Algorithm, Web database and Information Retrieval, etc.</li></ul> <b>Bachelor degree</b> -- Wuhan University, China <i>Sep.2011 – Jun.2015</i> <ul style="list-style-type: none"><li>• Major in Software Engineering</li><li>• Course: Data structure, Computer Network, Compiler, Database, Software Testing, etc.</li></ul>
<b>Experiences</b>	<b>Software Intern</b> in Autodesk, Novi <i>Jun.2016 – Aug.2016</i> <ul style="list-style-type: none"><li>• Developed API methods in C# and SQL to provide functionality tests for server sides application, Autodesk data management platform -- Vault.</li></ul> <b>Research Intern</b> in Chinese Academy of Science(ICT), Beijing <i>Jul.2014 – Jan.2015</i> <ul style="list-style-type: none"><li>• 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.</li><li>• Executed <b>8 million records</b> per day, 2GB in size. Using Python and MongoDB.</li></ul>
<b>Publication</b>	<b>Browsing Regularities in Hedonic Content Systems</b> IJCAI 2016, full pager <ul style="list-style-type: none"><li>• Ping Luo, Ganbin Zhou, Jiayi Tang, <b>Rui Chen</b>, Zhongjie Yu, Qing He.</li></ul>
<b>Projects</b>	Search Engine -- Information Retrieval <i>Nov.2015 – Dec.2015</i> <ul style="list-style-type: none"><li>• Sort results based on two ranking factors: <b>PageRank</b> and <b>Inverted Index</b>. Built dataset over Wikipedia corpus, 316M in size.</li><li>• Applied Hadoop <b>Map-Reduce</b> framework to calculate the Inverted Index.</li><li>• Be capable of scaling to roughly the level of Google in 2004.</li></ul> Operation System -- <b>Multi-threads</b> Management <i>Jan.2016 – Apr.2016</i> <ul style="list-style-type: none"><li>• Implemented user level threads library, CPU and monitors on Linux platform, including Mutex, Conditional Variables, supports <b>multiprocessors</b>.</li><li>• Implemented virtual memory translator, which manages <b>virtual memory</b> for application processes, supports address space creation, destruction, memory read and write.</li><li>• Implemented a multi-threaded, secure network file server, supporting file, directory creation and deletion. Using C++.</li></ul> VR Chat -- <b>Hackathon</b> project <i>Feb.2016 – Feb.2016</i> <ul style="list-style-type: none"><li>• Defined a fancy way to chat with friends, by applying <b>virtual reality</b>, using Google Cardboard and Microsoft Kinect 2.</li><li>• Designed and implemented the server, reading data from Kinect 2 and maintaining the communication between server and players by TCP/UDP, using C#.</li></ul> Graduation Project -- Data Warehouse <i>Feb.2015 – Jun.2015</i> <ul style="list-style-type: none"><li>• Built data warehouse based on <b>Pentaho Kettle</b>, mainly merging the data from relational databases into NoSQL database. Real data from JinPai ltd., China. Using Java.</li><li>• Enhanced the project warehouse by integrating MongoDB-Delete plug-in. Applying source code from Kettle organization on Github.</li></ul>
<b>Honors &amp; Awards</b>	<ul style="list-style-type: none"><li>• <b>National Scholarship of China</b> <i>2013-2014</i></li><li>• Third prize of Lanqiao Algorithm Competition of China <i>2014</i></li><li>• Excellent Youth Volunteer of Wuhan University <i>2012-2013</i></li></ul>
<b>Skills &amp; Interests</b>	Advanced: Java, C#, Python, MongoDB, MySQL, Git. Basic: C++, JavaScript, jQuery, HTML, CSS. Interests: Volunteer work, Cycling, Photography, Basketball, Tennis, Marathon.