

## Haibin Zhang

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EDUCATION	<i>Master in Computer Engineering, GPA: 3.00/4.00</i>	August 2016 - May 2018
	University of Michigan Operating Syst, Computer Architec, Web Dbase, Algorithms, Database Mgt Syst.	
	<i>B.S. in Electronic Information Engineering, GPA: 3.69/4.00</i>	
	University of Electronic Science and Technology of China(UESTC)	
SKILL	<i>Skill: Python, Java, shell, C, C++, SQL, HTML, JavaScript, Matlab, LaTeX.</i> <i>Environment: Linux, Mac OS, Windows.</i>	
PROJECT	<i>Info about LinkedIn: Crawler</i>	Winter 2017
	<ul style="list-style-type: none"><li>• Build a system providing suggestions about which linkedin user is more likely to push resume for me.</li><li>• Multi-process crawlers. One master assigns jobs to several workers, and each worker uses its own account to sign in and save given users' profile into MongoDB. Analysis data via MapReduce.</li><li>• Fault-tolerance: When errors accumulated to a certain number, the master will shutdown workers, save URL in the master into disk, record current environment info into log file.</li></ul>	
	<i>Operating System: Projects of Operating System</i>	Winter 2017
	<ul style="list-style-type: none"><li>• Threads: Design a concurrent Thread Library for multi-processor multi-thread applications. Clock and Least Recently Used algorithm are implemented. CPU goes sleep or wake up depending on current thread's request.</li><li>• Memory Manager: Design a pager that manages application processes' virtual address spaces, including swap block and file block. Zero-pin page, Copy-on-write and some performance optimization are implemented.</li><li>• File Server: Design a multi-threaded, secure network file server. Client processes will interact with it via network messages to access and modify their data. Access without permission will be abandoned.</li></ul>	
	<i>Web and Database: Projects of Web and Database</i>	Fall 2016
	<ul style="list-style-type: none"><li>• Online Photo Service(Web Dbase): Building a web server which users can visit public and personal albums, and upload new photos to these albums. 'Sign in' and 'Sign up' options are provided.</li><li>• MapRedcue(Web Dbase): Implementing a Hadoop-like MapReduce system, with master and worker nodes for map-reduce operations over large datasets, with a distributed file system, and fault tolerance to address datanode failures.</li><li>• Database: Build a Relational database with sqlplus. Use JDBC to get data from database. Export data from Oracle to MongoDB, and use JavaScript to operate data with MongoDB.</li><li>• Database: Implement a single-threaded version of ARIES to recover from crash. Page flush is considered.</li></ul>	