# Haibin Zhang

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**EDUCATION** 

Master in Computer Engineering

August 2016 - May 2018

University of Michigan

Operating Syst, Computer Architec, Web Dbase, Algorithms, Database Mgt Syst.

B.S. in Electronic Information Engineering, GPA: 3.69/4.00 University of Electronic Science and Technology of China(UESTC)

SKILL

Skill: JAVA, Shell, Python, C, C++, SQL, JavaScript, Matlab, LaTeX.

Environment: Linux, Mac OS, Windows.

## INTERNSHIP Android and Web developer in NOVA, LLC

Summer 2017

- Develop an android APP and Web server for doctors and patients to set medicine reminder, appointment and vital data(eg. Blood Pressure).
- Medicine reminder: Doctors can add/modify medicine reminder for specific patient via Web server, and users can see and receive their medicine reminder on time by Android APP.
- Setting appointment: users can set an appointment with their doctor, and occupied time slot would display in users' app. Doctors can receive the information about users appointment.
- Vitals data: Users use iHealth blood pressure to get BP data, and save it in cloud for following analysis.

### PROJECT

#### Operating System: Projects of Operating System

Winter 2017

- 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.
- Memory Manager: Design a pager that manages application processes' virtual address spaces, including swap block and file block. Zero-pin page, Copy-onwrite and some performance optimization are implemented.
- 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.

#### Web and Database: Projects of Web and Database

Fall 2016

- 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.
- 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.
- 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.
- Database: Implement a single-threaded version of ARIES to recover from crash. Page flush is considered.