

# XIAO LUO

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## EDUCATION

**The George Washington University**, Washington, DC May 2017

*Master of Science in Electrical Engineering (GPA: 3.9/4.0)*

**Tianjin University**, China Jun 2015

*Bachelor of Science in Electrical Engineering*

**Coursework:** Cloud Computing, Data Structures and Algorithms, Introduction to Operating System, Introduction to Computer Networks, Advanced Network Architectures

## SKILLS

- Programming Languages: Java, JavaScript, C, SQL, HTML, CSS, Matlab
- Platform/Frameworks: Hadoop, MapReduce, Node.js, Express.js, Docker, JQuery, MongoDB, Git

## WORK EXPERIENCE

**SERVYOU GROUP** - China May 2016 - Aug 2016

*Software Engineer Intern, Research and Development of Technology Group*

- Developed a query system on number of real estate users using JAVA
- Maintained and managed real estate information, including updating the data, adding new data to system and deleting outdated data from system based on MySQL

## PROJECT

**Movie Recommend System** Feb 2017 - May 2017

- Built a movie recommend system to recommend suitable movies for users from Netflix dataset
- Implemented collaborative filtering algorithm by designing rating matrix for each user and co-occurrence matrix of movies using MapReduce on Docker
- Implemented a matrix multiplication between the normalized co-occurrence matrix and rating matrix to get recommending results using MapReduce

**Page Rank Implementation in Hadoop** Mar 2017 - Apr 2017

- Implemented the PageRank algorithm from wiki dataset using MapReduce on Docker
- Improved the performance in consideration of random jump of users to solve dead ends and spider traps
- Implemented the page rank using PageRank convergence value by Iterating the MapReduce process

**Web Design of Picture Sharing Website** Feb 2017 - Apr 2017

- Implemented a picture Sharing Website based on RESTful API which supports create/edit/delete image, description and user comments
- Implemented authentication and sessions in the image to achieve privacy needs and access control
- Designed and developed interactive front-end system using Express, Node.js, Bootstrap and MongoDB as the database, then deployed on AWS

**N-Gram based Auto Completion** Feb 2017 - Mar 2017

- Analyzed wiki dataset of corpus and generated a list of frequently appeared n-grams using MapReduce on Docker
- Established statistical language model to rank next words/characters by probability, then designed database schema and stored data in MySQL
- Implemented real-time autocompletion using JQuery, PHP, Ajax to invoke data in MySQL and displayed the Auto Completion of search engines on web

**Security Rule Enforcement on Android** Sep 2016 - Dec 2016

- Designed a security feature Android APK based on JAVA and Android Studio
- Implemented Hook with Android API helping users to block malware from getting GPS information
- Implemented the rule enforcement using Xposed framework to hook the “get location or request location update” method and return null or fake value to the malware