## **ALVIN (MENG) CAO**

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# **EDUCATION**

THE GEORGE WASHINGTON UNIVERSITY, School of Engineering and Applied Science Master of Computer Science

Washington DC

Nov 2016

• GPA:4.00/4.00

Courses list

Design and Analysis of Algorithms Software Testing & Quality Software Engineering In-progress: Big Data & Analytics Computer System Architecture Full Stack Application Engineering Object-Oriented Design Advanced Software Paradigms Database Management Systems Information Retrieval Systems

DALIAN UNIVERSITY OF TECHNOLOGY, School of Materials Science

**Dalian China** 

July 2014

Bachelor of Engineering, Materials Science
• GPA:3.38/4.00

• Academic Scholarship, Prize of Social Work, Prize of Spiritual Advanced, Prize of Excellent Student Cadre

# **TECHNICAL SKILLS**

**Programming Languages:** Java, JavaScript, SQL, Ruby, HTML, CSS **Frameworks & Skills:** 

- Dropwizard, Struts2, Spring4, Hibernate4, Dropwizard, JSP, AngularJS, ¡Query, BootStrap.
- MySQL, SQL Server, MongoDB.
- Concurrency, Git, Linux.

## **WORKING EXPERIENCE**

#### SUNRISE SENIOR LIVING

McLean, VA

Software Development Intern

Aug 2016 – Now

- Refined Report Distribution Protocol (RDP) database which contains 60 tables and 3 million records with SQL Server Management Studio. Integrated and modularized stored procedures with T-SQL.
- Converted SSIS implementation for RDP from VB to T-SQL to simplify execution.
- Applied WinSCP as new FTP client to achieve auto-synchronization. Updated SQL script with WinSCP syntax.

#### ANSHAN HUAQIANG TECHNOLOGY COMPANY LIMITED

Liaoning, China

Software Development Intern

June 2014 - Aug 2014

- Developed performance appraisal system with Struts2 after researching client's leadership structure.
- Participated in designing the main rating algorithm. Achieved the controller part and configuration part.
- Provided user privileges management. Located bugs according to user's feedback. Released 2 versions.

#### STATE GRID LIAONING BRANCH

Liaoning, China

Software Development Intern

Jan 2014 - May 2014

- Provided user access management for State Grid Liaoning branch's power monitor system.
- Participated in virtualization of servers and workstations to improve system's performance.

#### PROJECT EXPERIENCE

#### PERSONAL WEBSITE Side Project

Jan 2016 – May 2016

- Built a dynamic RESTful website with AngularJS, jQuery, Dropwizard, Hibernate and Java. Achieved as Single-Page Application with AngularJS. Designed as RESTful with Dropwizard.
- Deployed front-end and back-end separately to Heroku. Applied remote AWS PostgreSQL database and remote Cloudinary file system. Contains development and production environment.
- Provided unit testing, integration testing and mock testing with Junit and Mockito. Contains API, logic and DAO layer. Designed as service-oriented, interface-oriented.

#### STACKOVERFLOW CLONE Course Project

Sep 2015 – Nov 2015

- Built a full-stack website which contains the main function of Stackoverflow with Struts2, Spring4, Hibernate, JSP and jQuery.
- Included authentication, authorization, e-mail system, user management system and log system. Achieved live chat with Firebase. Applied SimHash as question recommendation algorithm.

• Provided unit testing and integration testing. Designed as service oriented. Applied Test Driven Development strategy. Contains independent web API and DAO layer.

# MOVIE RECOMMENDATION ENGINE Course Project

*May* 2015 – *July* 2015

- Built a movie recommendation website with Java, JSP, Struts2 and Mahout.
- Applied mahout as clustering recommendation engine. Achieved user-base and item base recommender with user's history rating data.
- Designed to be enterprise-ready. Could accept multiple formats of data to give other recommendation such as restaurant, product, music and social networking.