ALVIN (MENG) CAO

202-8189050 • meng_cao@gwu.edu • www.linkedin.com/in/alvinmc • www.alvinmc.com •
https://github.com/AlvinMengCao

EDUCATION

THE GEORGE WASHINGTON UNIVERSITY, School of Engineering and Applied Science　　**Washington DC**
Master of Computer Science　　*Jan 2015 – Nov 2016*
- GPA:4.00/4.00

Courses list

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

DALIAN UNIVERSITY OF TECHNOLOGY, School of Materials Science　　**Dalian China**
Bachelor of Engineering, Materials Science　　*Sep 2010 – July 2014*
- 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: Dropwizard, Spring, Hibernate, AngularJS, BootStrap, Struts2
Skills: Algorithm, Data Structure, OOD, Design Pattern, REST API, Git, Linux, Concurrency
Testing: Mockito, Junit, Functional testing, Integration testing
Tools: Intellij IDEA, WebStorm, Terminal, DevTools, Apache Tomcat
Database: MySQL, PostgreSQL, SQL Server, MongoDB

WORKING EXPERIENCE

SUNRISE SENIOR LIVING　　*McLean, VA*
　Software Development Intern　　*July 2016 – Aug 2016*
- Refined Report Distribution Protocol (RDP) database which contains 60 tables and 3 million records using SQL Server Management Studio. Integrated and modularized stored procedures with T-SQL.
- Converted 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 Developer　　*June 2014 – Oct 2014*
- Developed performance appraisal system with Struts2 after researching client's leadership structure.
- Designed the controller and configuration part of the main rating algorithm.
- Provided support for user accessing. Resolved production issues and fixed bugs according to user's feedback. Released 2 versions.

STATE GRID CORPORATION OF CHINA　　*Liaoning, China*
　Software Developer　　*Nov 2013 – May 2014*
- Designed and worked on virtualization of servers and workstations to improve system's performance.
- Provided support for user accessing.

PROJECT EXPERIENCE

PERSONAL WEBSITE　*Side Project*　　*Jan 2016 – May 2016*
- Designed and built the service-oriented personal website as a Single Page Application using AngularJS, Dropwizard, Hibernate, Java and RESTful API.
- Deployed front-end and back-end separately to Heroku. Integrated remote AWS PostgreSQL database and remote Cloudinary file system. Contains development and production environment.
- Fully tested API, logic and DAO layers using Junit and Mockito. Included unit test, mock test and functional test.

STACKOVERFLOW CLONE　*Course Project*　　*Sep 2015 – Nov 2015*
- Built a website which contains the main functions of StackOverflow.com with Struts2, Spring4, Hibernate, Tomcat, JSP and jQuery.

- Developed authentication, authorization, e-mail system, user management system and logging system. Built live chat function with Firebase.
- Applied SimHash as question recommendation algorithm.
- Designed the application as service oriented which contains API and DAO layers. Provided unit test and integration test. Applied TDD on development.

MOVIE RECOMMENDATION ENGINE   *Course Project*   *May 2015 – July 2015*
- Built a movie recommendation website with Java, JSP, Struts2 and Apache Mahout.
- Integrated Apache Mahout as clustering recommendation engine to achieved user-based and item-based recommender using user historical rating data.
- Designed to be Enterprise Ready and easily scalable to accept multiple formats of data to give other recommendation such as restaurant, merchandise, music and social network.