Changshuo Gao

Cell:201-936-1623 | E-mail:gaochangshuo1989@gmail.com | Address: 8 Webster Ave, APT 3, Jersey City, NJ 07307

AREAS OF EXPERTISE

Languages: Java, Python, C++, PHP, Bash
Java Technologies: Spring, JDBC, Servlet, JSP, JAXB, JPA, RESTful Web Service
Web: HTML, JavaScript(jQuery), CSS(Bootstrap), Ajax, JSON, XML
Databases: MySQL, PostgreSQL, MongoDB
Development Tools: Linux(Ubuntu), Docker, AWS, Maven, Apache, Tomcat, GlassFish, Git, Jira
SDLC: Agile, Scrum

WORK EXPERIENCE

Software Developer Jun 2015-Present
Health Recovery Solutions Inc, New York, NY
- Developed and maintained Java-based web application using front-end technologies, JavaEE technologies, Docker and Maven, etc
- Fixed bugs, added features and improved performance to meet client requirements
- Built the report generation tool using database connection pooling technology to decrease the generation time and enhance the database efficiency
- Worked in agile development team environment and coordinated with the other teams

Application Development Intern Summer 2014
ConvergEx Group, Financial Engineering & Advanced Trading Solutions Team, Iselin, NJ
- Built a web application based on HTML, CSS, JavaScript and ASP.NET Web Forms for algorithmic trading system to implement business logic and interact with SQL Server database
- Worked closely with end users to establish requirements and determine priorities
- Developed a RESTful web service to provide functions of data processing

Information Technology Intern Spring 2013
Bosch and Siemens Household Appliance Co.,Ltd, Nanjing, China
- Created and maintained SQL Server database
- Provided database support for internal teams to meet their data requirements
- Developed database applications to improve routine tasks and simply manual tasks using HTML, JavaScript and JDBC

PROJECTS

Health Recovery Solutions Data Server
Individual Project Jun-Aug 2016
- Migrated daily updated data from MySQL to MongoDB in JSON format
- Developed a Spring Boot based RESTful web service to execute basic CRUD and aggregated operations using ODM (Object-Document Mapping)
- Dockerized MongoDB and Data Server so that they can integrate with other software stack

Dynamic Report System
Individual Project Feb-Apr 2016
- Created an interactive and dynamic user interface based on HTML5, jQuery and Bootstrap
- Provided an easy-to-maintain model based on DAO, factory, singleton and command design patterns
- Introduced in-memory data structure store to pre-cache metrics data into memory to reduce the data extraction time
- Enabled multithreading data collection and calculation based on to increase efficiency and reduce the report generating time

- Adopted connection pooling mechanism to reduce the overhead associated with connecting to the database to service individual requests

Automatic Test Environment Deployment and Monitoring System Based on Docker

Team Project   Oct-Dec 2015
- Created a scalable and highly available Docker distributed system using Docker Machine, Docker Swarm and NFS technology (used to store TLS certs and shared resources)
- Wrote Dockerfiles to configure sophisticated pre-built application stacks (Java, Maven, Apache and Git, etc) ready for launch
- Built Docker Compose file to define and configure multi-container Docker applications on Swarm network
- Created a monitoring tool based on Google cAdvisor, Prometheus and Postfix to monitor the status of each container on each node and send notifications when certain rules are violated

Automatic Files and Databases Backup Tool

Individual Project   Jun-Jul 2015
- Created Linux bash scripts to read configure variables from configure files and assign backup tasks to Cron and Duplicity
- Provided an additional option which can support MySQL database dump and backup
- Developed a Java based RESTful API to get cURL requests from backup server to monitor the backup status

Web Service for Clinical Information System

Individual Project   Sep-Dec 2014
- Provided the data model for the system using JPA and Java annotations
- Created a domain-driven design to add domain-specific logic to the data model
- Developed SOAP and RESTful web services based on JAX-WS and JAX-RS for the service-oriented architecture using Amazon EC2 and Glassfish application server

Web Analytics for Mooclist.com

Team Project   Jan-Mar 2014
- Parsed HTML pages of Mooclist and extracted all the data using Python
- Stored data into PostgreSQL database and built entities and relationships
- Created an interface for selecting complementary courses based on greedy searching algorithm

EDUCATION

Master of Science in Computer Science   **GPA: 3.77**
Stevens Institute of Technology, Hoboken, NJ   May 2015

Bachelor of Engineering in Computer & Communication Engineering
New York Institute of Technology, New York, NY   July 2012