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Status: H1B Holder

TECHNICAL SKILLS

- **Programming Language:** Java, MATLAB, Python, HTML, CSS, JavaScript, SQL, C#
- **Databases:** Relational Database (Oracle, MySQL) and NoSQL Database (MongoDB)
- **Computer Science:** Data structures and algorithms, OO design; Distributed systems design and development (MapReduce), Machine Learning

WORK EXPERIENCE

Baker Hughes Inc.

Houston, TX

Research Scientist

02/2015 - 03/2017

- Reservoir navigation services(RNS) is a dynamic, interactive software which enable users to view the real-time activity of oil drilling. I implemented 2D visualization for RNS using C#. It helped the field engineers to monitor the real-time position of logging tools and maximized production by keeping it in the pay zone. Production with RNS was 48% higher compared with the offsets.
- Prepared and provided tutorial presentations for customers about RNS application, provided technical support for field engineers.
- Generated benchmark models for signal simulation to test software efficiency and accuracy, analyzed software performance by comparing the simulation speed with MATLAB.
- Documented research reports and discussed with college scientists and engineers in weekly meetings.

Baker Hughes Inc.

Houston, TX

Research Intern

05/2014 - 08/2014

- Designed drilling and logging tools, built physical models for simulation to test tool's efficiency, delivered analysis results.
- Gave presentations in company and helped to determine technical strategy about tool development.

PROJECTS

AWS based Job Recommendation system

- Developed an interactive web page for users to search job positions (HTML, CSS, JavaScript, AJAX).
- Designed algorithms (content-based) to implement personalized job recommendation.
- Created Java servlets with RESTful APIs to handle HTTP requests and responses.
- Used MySQL database on Amazon RDS to store job data fetched from Github API.
- Used MonkeyLearn API to extract keywords from job descriptions.

Spring and Hibernate based Shopping system

- Used Spring framework to build a web application for users to shop and order items online.
- Built a web application based on Spring MVC to support item search and listing (dependency injection, inversion of control, REST API etc.).
- Implemented security workflow via in-memory and JDBC authentication provided by Spring Security.
- Utilized Hibernate to provide better support of database operations.
- Developed a fulfillment system by leveraging AWS Lambda and AWS Step Functions.

React JS based NBA Player Strength Visualization

- Created a dashboard using React, D3 and Ant Design backed by data crawled from stats.nba.com .
- Visualized individual player's shot data, including a shot chart and user profile view.
- Created multiple extra filters and shot themes(hexbin and scatter) to provide more customized visualization on the shot chart.
- Developed an autocomplete player search bar providing a list of players in the suggestion list.

Tinder-like News App

- Designed the Instagram Flavor News app based on Google Component Architectural MVVM Pattern.
- Implemented the bottom bar & page navigation using JetPack navigation component .
- Utilized RecyclerView's ViewHolderView to support swipe gestures for liking/disliking the news.
- Built the Room Database with LiveData & ViewModel to support local cache and offline model.
- Integrated Retrofit and Rxjava to pull the latest news data from a RESTFUL endpoint (newsapi.org) .

EDUCATION

University of Houston

Houston, TX

Master of Science in Electrical Engineering (GPA : 3.7)

08/2012 - 12/2014

Nanjing University of Aeronautics and Astronautics

Nanjing, China

Bachelor of Science in Information Engineering (GPA : 3.6)

09/2008 - 06/2012