QIAO "ADORA" ZHANG

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OBJECTIVES

Full-time software engineer position starting in January 2016 with strong interest in Web development (full-stack/front-end/back-end).

EDUCATION

University of Pittsburgh, Pittsburgh, PA
M.S. in Computer Science (3.5/4.0) Sep 2013 – Dec 2015

Beijing Normal University, Beijing, China
B.S. in Computer Science Sep 2009 – May 2013

Coursera (Online Course)
Social Network Analysis (With Distinction), Model Thinking

EXPERIENCE

Software Engineer Internship
Bentley Systems, Pittsburgh Jun 2015 – Aug 2015
o Tech Stack: AngularJS, ASP.NET, SQLServer
o Developed user configuration module that can add/modify/delete a user/role/profile/certificate.
o Added a Mapbox map to display/edit asset information.
o Created several administration functions such as using Microsoft report service to check the robustness of the server.
o Found and fixed several SQL query issues, cleaned legacy code to improve project readability and modularity.
o More Details: http://goo.gl/NHucGt

Teaching Assistant
University of Pittsburgh Sep 2013 – May 2015
o CS 1550 Introduction to Operating Systems
o CS 1520 Programming Languages for Web Applications
o CS 0007 Intermediate Programming

SKILLS

o **Proficient**: HTML/CSS, JavaScript (AngularJS, jQuery), C#(ASP.NET), PHP, Java, SQL, Netlogo, Go
o **Intermediate**: Android, Python
o **Basic**: Linux, Mac OS X, C/C++, R, Matlab

FELLOWSHIPS AND AWARDS

Arts and Sciences Fellowship
University of Pittsburgh Jan 2014

Social Work Scholarship
Beijing Normal University Sep 2011

PROJECTS

Simulation of Transactional Row Column Storage
o *Java Feb 2015*
o Built a transactional row column storage database prototype that efficiently supports concurrent execution of OLTP (i.e., transactions) and OLAP (i.e., aggregate queries) workloads.
o Simulated concurrent database transactions in main memory (divided into row and column storage) and disk.
o Implemented LRU page replacement algorithm for page swapping.
o Employed the Strict Two-Phase Locking protocol to ensure serializability for transactions.
o Implemented wait-for graphs for deadlock detection. Transactions with deadlocks are aborted.

Camera Object Tracking Android App
Java (Android), OpenCV Sep 2014
o Created a single-view color blob object tracking app that utilizes OpenCV Android library.
o Provided a new input channel (the front camera) that detects an arbitrary color blob and use it as a precise on-screen cursor, which reduces the footprint of the fingertip and allows remote control.

Simple Remote Procedure Call Implementation
Go Sep 2014
o Implemented a protocol library based on UDP/IP socket that supports remote procedure calls.
o Achieved load balancing by maintaining a naming server and distribute workload using round-robin mechanism.
o Supported bulk acknowledgement for data packet transmission.
o Achieved fault tolerance by replicating worker threads.

RapidBoard Virtual Keyboard
Java Sep 2014
o Implemented an on-screen virtual keyboard that supports "Swype" input.
o Provided both visual and audio feedback for better user experience and a functional context menu for faster input.
o Demo: https://www.youtube.com/watch?v=MUibU75pujY

Visualization of Settlement Change in Chifeng Region
JavaScript (D3, jQuery) Mar 2014
o Provided intuitive and interactive visualization on large dataset for domain experts to understand the amount of pottery pieces found in the Chifeng area in a chronological way.
o Demo: https://www.youtube.com/watch?v=sU4HTDH8LRU