MS. QIAO "ADORA" ZHANG

adora91@gmail.com
http://qiaozhang.tk | http://github.com/adorazhang
(412)-961-2454
323 Morewood Ave, Apt 14, Pittsburgh PA 15213

OBJECTIVES

Full-time software engineer position starting in February 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
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
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