
Jerry, Richeng HUANG

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Active, diligent and enthusiastic software engineer student. Interested in any kind of project concerning web technology and software development.

EDUCATION

2015 Dec	University of Illinois, Urbana-Champaign			
	Master of Science in Computer Science			
2014 Jun	The Hong Kong University of Science and Technology, Hong Kong			
	BEng in Computer Science	GGA: 3.735/4.30	major GPA: 3.844/4.30	
2012 Jun	Sun Yat-sen University, Guang Zhou, China			
	BEng in Computer Science	GPA: 3.3/4.0	major GPA: 3.6/4.0	Rank: 5/35

AWARDS

- 2012 - 2014 First Class Honors in Graduation, HKUST
 - 2012 - 2013 Scholarship Scheme for Continuing Undergraduate Students , HKUST
 - 2013 - 2014 Dean's List, Fall Semester 2013-2014 & Spring Semester 2012-2013, HKUST
 - 2011 - 2012 Second Class Scholarship, Sun Yat-sen University
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SKILLS

- Proficient in C++, Java, Python, PHP, html, JavaScript, jQuery, Regular expression, Git.
 - Familiar with OpenGL, Scheme, MySQL, Flash, Matlab
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CURRICULAR EXPERIENCES

- **Knowledge Discovery over English Songs, Final Year Project** 2013 Sep - 2014 May
 - Generate melodies given a sequence of English words as input. Demo:rayw2.herokuapp.com
 - Establish a frequent pattern set containing pairs of lyrics and melodies from over 1,000 English songs.
 - Calculated a distance metric between syllable tones(lyrics) and melodies.
 - Generated a melody sequence automatically by matching lyric sequence from the frequent pattern set.
- **iSearch, a Search Engine** 2013 Sep - 2013 Nov
 - Indexed 1000 web pages with multithreading. Implemented spelling suggestion by AJAX.
 - Ranked the page by combining scores of vector space model and scores of Page Rank.
 - Built up friendly user interface by using Bootstrap and programmed in JavaServer Pages (JSP).
- **Performance analysis of Android application** 2013 Jun - 2013 Aug
 - Undergraduate Research Opportunity Program*
 - Generated up to 100,000 random events for each of 5 Android apps with average 55% coverage.
 - Built a application to Identify the bottleneck of all component lifecycle handler.
 - Provided optimisation suggestion to the apps based on the program output.
- **Twitter Client on Java Platform** 2013 Mar - 2013 Apr
 - Developed in Agile Software Development Process with Scrum Framework.
 - Implemented novel functionalities such as special follow and embedded games.
 - Followed Continuous Integration and kept software testing.
- **OpenGL Hierarchical Robot Model** 2013 Feb - 2013 May
 - Built a 3D robot and implemented Bezier curve, B-spline curves and Inverse Kinematics to control the position and angle of any components of the robot.
 - Implemented particle systems to simulate water fountains, ball collisions, etc.
- **Micro-Scheme Implementation** 2012 Sep - 2012 Dec
 - Scheme* is a functional programming language, a dialect of Lisp
 - Parsed s-expression into tree data structure by using bison and flex.
 - Evaluated s-expression in tree structure based on the rules of Scheme (in C++).

WORK EXPERIENCES

- **Web developer (Part-time) for Imos: <http://i-mos.org>** 2013 Dec - 2014 May
Imos: an interactive Modeling and Online Simulation Platform.
 - Optimised the performance and stability of the website and refined the user interface.
 - Programmed in both server side and client side by using CodeIgniter PHP framework(MVC), KnockoutJS(MVVM pattern) and jQuery, and managed database by MySQL.
 - **Student Teaching Assistant in C++ Programming lab session** 2013 Sep - 2013 Dec
 - Instructed and graded 100 junior undergraduates' lab assignments.
 - **Summer Intern in 115 Technology Co., Ltd.(www.115.com)** 2012 Jun - 2012 Jul
 - Implemented functions and algorithms in Javascript and jQuery.
 - **Summer Intern in MassMutual Asia Co., Hong Kong Branch** 2011 Jul - 2011 Aug
 - Analyzed survey data from over 50 clients, completed 15-page report for product design and developed financial solution for a key client.
 - Assisted team in awarding runner-up in the intra-company competition among all intern teams.
 - **Game volunteer of 2010 Asian Games, Guangzhou** 2010 Nov
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COURSES

Computer Graphics	Operating Systems	Design and Analysis of Algorithm
Principles of Programming Languages	Computer Organisation	Software Engineering
Database Management Systems	Computer Communication Networks	Search Engines
Theory of Computation	Introduction to Data Mining	