KHOI HOANG

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EDUCATION

California State University, Sacramento – GPA: 3.91   August 2015 – December 2017 (Expected)

Bachelor of Science - Computer Science. Minor in Mathematics

Dean's Honor List – Top 10% (Fall 2015 – Spring 2016)

Coursework:

    Completed: Data Structures and Algorithm, System Programming in Unix, Computing Theory

    In Progress: Graphics Programming, Database Management System, Computer Networking

WORK EXPERIENCE

Undergraduate Research Assistant   **California State University, Sacramento**   September 2016 – Present
- Researched focused on Android and Internet of Things (IoT) security under the mentorship of Dr. Xiaoyan Sun.
- Planned and edited research paper for publication.

Software Engineer Intern   **VSP Vision Care**   May 2016 – August 2016
- Part of an Agile team, developed a workflow application using AngularJS and Node.js to manage 500,000 claims per year. The application reduced annual labor costs by $75,000 per year by increasing uptime and improving multiple user availability.
- Created HATEOS RESTful services using JBoss-Rest easy and JPA-Hibernate to support the front end UI.
- Led team of 4 in writing unit and end-to-end testing. Researched new test frameworks Karma, Protractor and Cucumber to train team members and configured test suite on Jenkins.
- Code is scheduled to be pushed to production in 3 weeks after internship end date.

IT Technician   **California State University, Sacramento**   June 2015 – Present
- System Administrator, managed networks and servers for 5 CSUS Academic Departments.
- Repaired computers with software, hardware problems and maintained lab systems.
- Developed scripts to automate network administration tasks and application deployments.

Programming Tutor   **MESA, Cosumnes River College**   Mar 2012 – May 2015
- Provided tutoring for students in all offered programming courses.
- Analyzed defects in students' code and explained debugging strategies.
- Held impromptu pair-programming sessions and devised study plans for exams throughout the semester.

ACADEMIC PROJECTS

IBG
- In a team of 2, developed a Chrome extension for remotely watching Crunchyroll with friends and family.
- Supported synchronized video playback, player controls, and group chat.
- Currently a work in progress.

Spaceship
- Developed a 2D game using Codename One and multiple design patterns in Java: iterator, singleton, observer, etc.
- Compatible with Android, iOS, Windows (Cross-platform).

Sequential Multiplier
- Implemented a sequential circuit of a 7-bit 2's complement multiplier using Verilog.
- Designed circuit using 8-bit adder/subtractor and bit-serial partitioning using 2-bit CLA adder.

UNIX Shell
- Programmed a simple shell using C language.
- Supported basic UNIX commands, I/O redirection, signals, and background jobs.

Asteroids & 2048
- Programmed clones of 2048 and Asteroids games using Python and simpleGUI.
- Implemented the algorithm using list, dictionary and complex calculations.

TECHNICAL SKILLS

Proficient in: Java, C++, C, JavaScript, AngularJS, Node.js, Python, HTML, CSS, Protractor, Cucumber, Karma

Experience in: RESTful API, Codename One, SQL, MIPS Assembly, Verilog

Applications: Eclipse IDE, Maven, GIT, Jenkins, JIRA, MS Visual Studio, Altiris

Operating Systems: Windows, OSX, UNIX, LINUX