

# KHOI HOANG

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## EDUCATION

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**California State University, Sacramento – GPA: 3.91/4.0** August 2015 – December 2017 (Expected)

Bachelor of Science - Computer Science. Minor in Mathematics.

Concentration: Cyber Security and Operation.

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

Coursework:

**Completed:** Data Structure, Computer Networking, Database Management System, Graphics Programming

**In Progress:** Operating System, Advanced Algorithm, Computer Forensics

## WORK EXPERIENCE

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**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 availabilities.
- 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

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**Driving Simulator (Senior Project)**

- In an Agile team of five, developed a virtual 3D world driving simulator using real time data to analyze traffic and drivers' behaviors – Oculus Rift, Leap Motion, Unreal Engine, C++, MariaDB.

**Object Recognition**

- Implemented a neural network to detect objects from images – Python, Numpy, Matplotlib, Scikit-learn.

**Neural Network**

- Implemented a neural network to predict problem based on real dataset – Python, Numpy, Pandas.

**Spaceship**

- Developed a 2D cross-platform mobile game using multiple design patterns: iterator, singleton, command, and observer – Java, Codename One.

**Sequential Multiplier**

- Implemented a sequential circuit of a 7-bit 2's complement multiplier using 8-bit adder/subtractor – Verilog.

**UNIX Shell**

- Programmed a simple shell that supports basic UNIX commands, I/O redirection, and background jobs – C.

**Asteroids & 2048**

- Programmed clones of 2048 and Asteroids games using list, dictionary and complex calculations – Python.

## TECHNICAL SKILLS

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

**Experience in:** Numpy, Matplotlib, Scikit-learn, REST API, AWS, Codename One, SQL, Verilog

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