6068 Pitcairn St.
Cypress, CA 90630
(714) 234-7810

DEREK NGUYEN

ngderek24@gmail.com
http://github.com/tincan24
linkedin.com/in/dereknguyen24
http://tincan24.github.io

EDUCATION

University of California, Los Angeles   **Fall 2013 – Spring 2017 (Expected)**

- 3rd year undergraduate Computer Science, GPA: 3.593
- **Coursework:** Software Construction Laboratory, Logic Design of Digital Systems, Operating Systems Principles, Computer Systems Architecture, Database Systems, Algorithms and Complexity, Computer Network Fundamentals, Fundamentals of Artificial Intelligence, Formal Languages & Automata Theory

EXPERIENCE

❖ **UCLA EPSS Space Environment Model Group**   **October 2015 – December 2015**

- o Write and test Matlab scripts to prepare inputs to an executable to do simulation regarding radiation belts around Earth and plot the results with graphs.

- o Maintained and wrote documentation for the scripts.

PROJECTS

❖ **Password Manager (Languages: Java)**   **July 2015**

- o Desktop application built with Eclipse Window Builder. Password Manager allows the user to manage their usernames and passwords and also contains a random password generator

- o Information is stored in a database using SQLite and encrypted using DES encryption algorithm with a symmetric key input by the user.

❖ **Personal Website (Languages: HTML, CSS, Javascript, Framework: Bootstrap)**   **July 2015 - Present**

- o Online portfolio of my programming skills, interests, projects, and a few useful web tools, such as a world clock and a stopwatch

❖ **Steganography (Languages: Java)**   **August 2015**

- o Allowed user to hide text message inside an image or retrieve hidden messages using the same program

- o Encrypted bits of each ASCII character in the message in the last bit of contiguous pixels of an input png image

❖ **HackSC 2014 (Name: in kitchen, Languages: Javascript, HTML, CSS)**   **November 2014**

- o With a team of four people, we made a web application where the user can input food ingredients that they have and it will generate a list of recipes corresponding to those ingredients

- o Implemented the front-end UI of the application with a partner and made use of Yummly's API

❖ **Movie Database (Languages: C++, PHP, HTML)**   **Spring 2015**

- o Given information about movies and actors, built a B+ index tree for the data for faster runtime search

- o Created a web user interface that allowed users to insert new movies and search for available movies/actors in the database.

EXTRACURRICULAR

❖ **AIAA Unmanned Aerial Systems (Language: Python, Matlab)**   **October 2015 – Present**

- o Working on artificial intelligence team to implement an aircraft's image recognition system to recognize shapes and letters of signs as it navigates through designated waypoints on a test field using the OpenCV library

❖ **IEEE MicroMouse (Language: C++)**   **October 2014-May 2015**

- o Group project to create a maze-solving robot mouse using Arduino and Teensy microcontrollers, sensors, H-bridge, and wheel motors

SKILLS/STRENGTHS

Programming Languages: C++, Java, HTML, CSS, Javascript, Python, Matlab, PHP, SQL, Lisp, Bash

Development Tools: Visual Studio, Eclipse, IntelliJ IDEA, Git, Sublime Text, Maven, Emacs, VirtualBox, Android Studio, SQLite, Arduino, Electron, Adobe Photoshop/Illustrator