

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

# DEREK NGUYEN

ngderek24@gmail.com  
<http://github.com/tincan24>  
[linkedin.com/in/dereknguyen24](https://www.linkedin.com/in/dereknguyen24)  
<http://tincan24.github.io>

## EDUCATION

### University of California, Los Angeles

Fall 2013 – Spring 2017 (Expected)

- 3<sup>rd</sup> year undergraduate Computer Science, GPA: 3.555
- **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

### ❖ Space Environment Model Group

October 2015 – Present

- Writing and testing computer codes, plotting and visualizing data, maintaining and writing documentation for data and models regarding astronomical features in outer space environment

## PROJECTS

### ❖ Password Manager/Secret Email/Steganography (Languages: Java)

July - August 2015

- Desktop applications built with Eclipse Window Builder. Password Manager allows the user to insert, delete, update, and search their usernames and passwords stored using SQLite.
- Secret Email is capable of sending encrypted email messages to recipients and also decrypt them
- Steganography allows the user to hide text messages inside an image and also retrieve the hidden messages

### ❖ Personal Website (Languages: HTML, CSS, Javascript, Framework: Bootstrap)

July 2015 - Present

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

### ❖ Tetris Game (Languages: Java)

September 2015 – Present

- Working with a friend on an implementation of the classic tetris game in Java using Maven, JUnit and Mockito for unit testing, and Java Swing for graphics.

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

November 2014

- 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
- 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

- Given information about movies and actors, built a B+ tree upon the data for fast lookup
- Created a web user interface that allows 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

- Worked on AI with a team to implement an aircraft's image recognition system to recognize shapes and color of signs as it navigates through designated waypoints on a test course

### ❖ IEEE MicroMouse (Language: C++)

October 2014-May 2015

- 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