



## EDUCATION

University of California, Berkeley  
- Major: Cognitive Science, B.A.  
Graduation Date: June, 2020

## CONTACT DETAILS:

Mobile: 714-715-1048  
nathan1020@berkeley.edu  
GitHub: [github.com/sihoonathan](https://github.com/sihoonathan)  
Portfolio:  
<https://sihoonathan.github.io/portfolio/>

## SKILLS AND QUALIFICATIONS

- Have curious mind on how and why things work the way they do.
- Detail Oriented, Organized, and Persistent
- Have strong work ethics when it comes to problem solving.
- Experience in HTML/CSS/Javascript (Calculator, Etch-A-Sketch, Rock-Paper-Scissors)
- Experience in Python, Java, and C++ (Enigma, Hog, Yelp Maps, Ants, Scheme, Tablut, Signpost, Blackjack)

# NATHAN CHOI

## SOFTWARE DEVELOPER

## EXPERIENCE/PROJECTS

- **CALCULATOR WEB APP**  
([SIHOONATHAN.GITHUB.IO/CALCULATOR/](https://sihoonathan.github.io/calculator/))
  - Developed an interactive calculator using html/css/javascript . Implemented both keyboard and mouse functionality.
- **ETCH-A-SKETCH WEB APP**  
([SIHOONATHAN.GITHUB.IO/ETCH-A-SKETCH/](https://sihoonathan.github.io/etch-a-sketch/))
  - Developed a web version of Etch-A-Sketch, with both random color generation and classic grey color generation selections available.
- **ROCK-PAPER-SCISSORS WEB APP**  
([SIHOONATHAN.GITHUB.IO/ROCK-PAPER-SCISSORS/](https://sihoonathan.github.io/rock-paper-scissors/))
  - Developed an interactive Rock-Paper-Scissors game using html/css/javascript.
- **ENIGMA**
  - Programmed an Enigma Machine, which was used during WW2, in Java
- **HOG**
  - Developed a simulator and multiple strategies for the dice game Hog. In Hog, two players alternate turns trying to be the first to end a turn with at least 100 total points. On each turn, the current player chooses some number of dice to roll, up to 10. The player's score for the turn is the sum of the dice outcomes. The code was developed using control statements and higher-order functions together.
- **YELP MAPS**
  - Created a visualization of restaurant ratings using machine learning and the Yelp academic dataset. In this visualization, Berkeley is segmented into regions, where each region is shaded by the predicted rating of the closest restaurant (yellow is 5 stars, blue is 1 star). Specifically, the visualization was constructed using a Voronoi diagram.
- **ANTS**
  - Programmed a skeletal code for a tower defense game called Ants Vs. SomeBees, which is inspired by PopCap Games' Plants Vs. Zombies. The rule of the game is that the ants must protect their queen from the evil bees that invade their territory by throwing leaves at them.
- **SCHEME**
  - Developed an interpreter for a subset of the Scheme language using Python.