

# Vincent A. Titterton

## Computer Science Undergraduate at the University of California, Santa Cruz

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[My Portfolio](#)

[LinkedIn](#)

[GitHub](#)

## Education

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University of California, Santa Cruz - 3.98 GPA

Sept 2018 - present

- Junior, Computer Science major

University of California, Davis - 3.8 GPA

June - July 2017

- Summer Session classes while in high school: Statistics 13 and PHE 044.

## Experience/Projects

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Algorithms Engineering Internship - Bitbroker Labs

Feb - April 2020

- Edtech course review and design in C++

[Formula Slug](#) - C++

- School club that builds an electric race car and competes in the Formula SAE Electric.
- Programming microcontrollers for the electronic components of the car.

[Connect 4 AI](#) - Java

- Player vs computer Connect Four.
- Computer uses Depth First Search (depth = 8) + a non-recursive position rating method.

[Path Finder](#) - Javascript / HTML Canvas - [Try it out](#)

- Finds the shortest path between two vertices on a graph while avoiding barriers.
- Can select between Breadth First Search and Dijkstra's Algorithm (for diagonal moves).

[Sorter](#) - Javascript / HTML Canvas - [Try it out](#)

- Visual array of adjustable size which can be shuffled and sorted.
- Ten different sorting algorithms are available to choose from.

[Battleship](#) - Java / Swing

- Single player battleship game with randomly spawned ship locations.
- Goal is to sink all the ships in as few moves as possible.

CruzHacks 2020 - MLH hackathon hosted at UCSC

## Skills

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Languages: Java, C, Python, C++, Assembly, JavaScript, HTML, CSS

Tools: Git, Unix, GNU Make

## Relevant Course/Subject History

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**Coding:** Object Oriented Programming, Assembly Language, Advanced Programming, Java, C, C++

**Theory:** Data Structures, Search/Sorting Algorithms, Graph Algorithms, Abstract Data Types, Algorithm Runtime Analysis

**Math:** Discrete Math, Linear Algebra, Statistics, Graph Theory, Multivariable Calculus

## Awards and Honors

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UC Santa Cruz Dean's Honors (x4)

2018 - 20

CMPS 12A Top 15 Final Projects

Dec 2018

Piedmont High School Honor Society

2016 - 18

## Work and Volunteer History

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**Key Club International:** Volunteer organization (community service)

2016 - 18

**Full Belly Farm:** Volunteer annually at the Hoes Down Festival

Oct 2014 - present

**Math Tutoring:** Tutored students in algebra, trigonometry, calculus

2017 - 18

**Election Day Poll Worker:** Set up, operated, and broke down a polling station

2018

**Hugh Groman Catering:** Serve food and bus dishes in high class events

June 2019 - present