

# Kevin Corcoran

Github : <https://www.github.com/kevin-corcoran>

kcorcoran@berkeley.edu  
(+1) (530) 720-0530

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EDUCATION	<b>University of California, Santa Cruz (2020-2022)</b> <i>Masters of Science, Applied Mathematics</i>
	<b>University of California, Berkeley (2017-2019)</b> <i>Bachelor of Arts, Applied Mathematics (Numerical Analysis)</i>
	<b>Butte College (2015-2017)</b> <i>Associates of Arts, Mathematics</i>
TECHNICAL SKILLS	<b>Languages :</b> Python, C++, Java, Julia, MATLAB, Fortran <b>Familiar :</b> Latex, Bash, Arduino, Raspberry Pi, Fusion 360, Scheme, MySQL, Pyglet
EXPERIENCE	<b>Teaching Assistant: Mathematical Methods for Engineers I    Spring 2021</b> Planned and facilitated weekly discussion sections. Emphasized conceptual understanding through carefully chosen practice problems, held office hours and graded exams.
	<b>Teaching Assistant: Mathematical Methods for Engineers II    Winter 2021</b> Planned and facilitated weekly discussion sections. Emphasized conceptual understanding through carefully chosen practice problems, held office hours and graded exams.
	<b>Teaching Assistant: Mathematical Methods for Economics II    Fall 2020</b> Planned and facilitated weekly discussion sections. Emphasized conceptual understanding through carefully chosen practice problems, held office hours and graded exams.
	<b>Tutor: SY Academy    Spring 2020 - Summer 2020</b> Tutored small weekly groups at the college level. Topics included calculus, linear algebra, and computer science taught in C++ and Java. I prepared short lectures, help with homework, and provided additional practice problems.
	<b>Homework Reader: MATH 104 - Real Analysis    Summer 2020</b> One of two homework readers for a class of 80 students in UC Berkeley's upper division, proof-based real analysis course.
	<b>Tutor: SY Academy    Spring 2020 - Summer 2020</b> Tutor for small weekly groups at the college level. Topics include calculus, linear algebra, and computer science taught in C++ and Java. I prepare short lectures, help with homework, and provide additional practice problems.
	<b>Port Captain: Cal Sailing Club    Summer 2019 - Summer 2020</b> Club member elected position responsible for hiring, scheduling, training, and management of Dayleaders.
	<b>Dayleader: Cal Sailing Club    Summer 2018 - Summer 2021</b> In charge of daily operations, club equipment, and general safety of club members for a sailing club serving Bay Area residence.
	<b>Homework Reader: MATH 128A - Numerical Analysis    Summer 2019</b> Graded weekly homework for 36 students in UC Berkeley's upper division, first semester course in numerical analysis.

**STEM Instructor: United Technologies for Kids (UTK)**      **Summer 2019**  
Taught the basics of Arduino and 3D modeling to High School age kids in Chinchu, Peru. Developed instructional material, and Arduino code, for a 3D printed electric motor.

**Homework Reader: MATH 110 - Linear Algebra**      **Summer 2018**  
Graded weekly homework for 36 students in UC Berkeley's upper division, proof-based linear algebra course.

**Academic Intern: CS61A**      **Spring 2018**  
Assisted students in Berkeley's introduction programming course (Structure and Interpretation of Computer Programs) at weekly lab and group office hours with homework, projects and lab assignments.

## PROJECTS

**Trash Sorting Computer Game**      **Summer 2018**  
Made a Tetris inspired sorting game as an instructional tool for a Waste Management role held in cooperative housing.  
**Link :** [https://github.com/kevin-corcoran/WRM\\_Game](https://github.com/kevin-corcoran/WRM_Game)

**Food Computer**      **Spring 2018**  
Built a version of MIT's open sourced food computer made of out cardboard and hydroponically grew a tomato plant. Done in interest of social issues surrounding winter tomatoes grown in Florida.  
**Link :** <https://github.com/kevin-corcoran/cardboardfood>

**Physics Project**      **Spring 2017**  
Wrote a program in C++ to efficiently find all equivalent resistances, and output the circuit, given some number of resistors of equal resistance.  
**Link :** <https://github.com/kevin-corcoran/resistance>

**Logic Game**      **Fall 2016**  
Wrote a text-based fantasy game for learning the basics of symbolic logic.

## AWARDS AND HONORS

• **Outstanding Student of Physics**      **Spring 2017**  
• **Mathematics Honors (Butte College)**      **Spring 2017**

## TECHNICAL COURSES

**Computer Science and Electrical Engineering:** Data Structures, Fourier Analysis, Designing Information Systems and Devices, Optimization  
**Mathematics:** Linear Algebra, Numerical Analysis, Abstract Algebra, Real Analysis, Complex Analysis, Numerical Solutions to Differential Equations, Partial Differential Equations  
**Physics:** Electromagnetism and Optics, Quantum Physics, Quantum Computing