



San Francisco Bay Area
+1 650 575 0625
theorodester@gmail.com



TheSharkhead2
linkedin.com/in/theorode/

WHO AM I?

I am a student enthusiastic about mathematics, computer science, and physics. I aim to understand computer programs at all levels and enjoy implementing features from scratch. I love exploring math education and enjoy teaching concepts in any capacity. In everything I do, I aim to understand the world around me better: building simulations of our world, finding intuitive ways to understand how our physical world works, and learning mathematical abstractions to model anything I can.



React Native



Office



git



pandas



TensorFlow



Unreal



PROJECTS

2021-2022

Writing and Teaching Math Curriculum

Identified major issues with traditional middle/high school math education through numerous interviews with a diverse group of teachers. Designed custom course curriculum with class notes typeset in LaTeX. Organized and taught week-long calculus bootcamp for 9th graders using my custom curriculum.

LaTeX

late 2021

The Three Body Problem Simulation

Built a simulation engine for the infamous Three Body problem. Collaborated with a group to improve accuracy and dependability of the simulation. Analyzed starting conditions and critical points to develop an understanding of the problem.

Python / PyGame

early 2021

Music Recommendation Engine

Built a machine learning model to predict likelihood of a user enjoying a specific song. Interfaced with the Spotify API to grab song data. Constructed small desktop application to view currently playing Spotify song, rate how enjoyable the song is, and see model's prediction of likeability.

Python / pandas / Tkinter / TensorFlow

2020

COVID-19 Data Analysis

Cleaned and formatted COVID-19 case and death data. Crafted visual representations of the data. Analyzed the data using numerous predictive methods to determine likelihood of approaching peaks and spikes.

Python / pandas

EDUCATION

2022-2026

Undergraduate Degree

Current freshman pursuing a degree in Computer Science and Math.

Harvey Mudd College

2018-2022

High School

GPA: 3.91. Relevant coursework: Linear Algebra, Advanced Probability, Differential Equations, Quantum Information and Computation, Advanced Mechanics, Algorithms, Computer Security, Computer Vision, Intro and Advanced Machine Learning, Multivariable Calculus, Graph Theory, Game Design, Modern Physics, Mobile App Design, Cryptocurrency, Computer Programming

The Nueva School

SKILLS

Teamwork - I frequently work in teams and I find the ability to exchange and challenge ideas paramount to success in any project.

Teaching - Whenever given the opportunity, I jump in to assist classmates or younger students with their classwork. I enjoy explaining anything from simple topics to advanced topics and always aim to have them fully understand what I am explaining.

Leadership - I can set goals easily and encourage my team to get to that goal efficiently and effectively.

HOBBIES

I love playing tennis and skiing. I also enjoy sleight of hand magic and have organized a group of fellow magicians to perform at birthday parties. And I can frequently be found solving puzzles, anything ranging from a rubik's cube to a 5000 piece floor puzzle.

NON PROFIT

I have helped with servicing and repairing bikes to be donated to people in need.