Jacob H. Nie

jacobhnie@ucsb.edu (669)-777-8902 www.jacobnie.com

Education

University of California, Santa Barbara, B.S. Physics

(expected) 2020 - 2024

Monta Vista High School, Cupertino, CA

2016 - 2020

June 2019

Selected Academic Honors

Rudolf Ortvay Int'l. Competition in Physics, Second Prize

November 2019

- $\bullet\,$ Two week long online competition hosted by the Eotvos University in Budapest.
- Received second prize internationally among college students while competing as a high school senior; top score among first year undergraduates and below

USA Physics Olympiad, Gold Medalist, National Camp Attendee

• Scored in the top 20 nationally (unranked) to receive an invitation to the national training camp at the University of Maryland, which selects the team for the International Physics Olympiad through written examinations and laboratory work.

Princeton University Physics Competition, Gold Medalist

• Awarded 7th place and a gold medal in this national competition hosted by Princeton students for high school students.

Skills

Proficient in Python 3 and LATEX Familiar with MATLAB and Mathematica

Coursework

Personal Self Study

2017 - present

2017 - 2019

November 2018

Physics:

- Physics by Resnick, Halliday, and Krane
- Introduction to Classical Mechanics by Morin
- Electricity and Magnetism by Purcell
- Vibrations and Waves by French
- (in progress) Principles of Quantum Mechanics by Shankar
- (in progress) *Mechanics* by Landau and Lifshitz

Mathematics:

- Div, Grad, Curl by Schey
- Introduction to Linear Algebra by Strang
- Elementary Differential Equations with Boundary Value Problems by Edwards and Pennev
- (in progress) Mathematical Methods for Physics and Engineering by Riley, Hobson, and Bence

Work Experience

Private Physics and Mathematics Tutoring, Cupertino, CA

Prepared middle and high school students for both school math/physics and competitive math/physics.