# STEVEN NGUYEN

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**EDUCATION**

**UC Merced** BACHELORS OF SCIENCE, PHYSICS

**Courses:** General Physics, Electrodynamics, Electrodynamics 2 and Optics,

Thermodynamics, Special Relativity, Quantum Mechanics 1&2, Physics labs,

General Calculus, Vector Calculus, Differential Equations, High Order

Differential Equations, Physics Special Courses

**TECHNICAL SKILLS**

**Computer languages** • Java, Python, R

**Tools** • Origin, Oscilloscope, Laser,

**WORK EXPERIENCE**

**Physics Labs** • Replicating Sonoluminescent through the use of acoustic wave and bubble

Jan 2018- May 2018 trapping technique.

• Observing Shot Noise and Johnson Noise utilizing high and low powered

electronic devices. Observed other effects such as manipulating resistors and

frequencies.

• Experience with lab equipment such as: oscilloscope, tuning fork, soldering,

Lasers.

**Research assistant** • Using Python to program a one dimensional random walk with adjusted

Dec 2017- 2019 parameters such as: inputting hypothetical distance and allowing simulating

(Including summer) to calculate distance, inputting biased data with hypothetical distances

(to compare data averages).

• Created a Poisson distribution, under fair probability conditions, to find the displacement, location, mean, and variance. Then simulated multiple distributions and use regression model and supervised learning to determine the type of

distribution, the conditions, and if the distribution is legitimate.

**Machine Learning** • Goal: to create an artificial intelligence to utilize pattern recognition

techniques and observe behavioral changes within given data, while

being able to distinguish biased data or false inputs within data.

**ACTIVITY**

**Tutoring** (junior-senior year of highschool) •Tutoring younger students in public library

for volunteering hours