INSERT NAME HERE

(SUMMARY OR OBJECTIVE)

Recent graduate with a degree in physics & mathematics with a passion for engineering and problem solving. Proven experience working in a lab setting developing and carrying out new calibration methods for self-assembled scintillation counters. Strong individual drive and a wide array of technical skills including multiple coding languages and CAD software experience

EDUCATION AND CREDENTIALS

BACHELOR OF SCIENCE (B.SC.) IN PHYSICS AND MATHEMATICS, 2021

University of California, Los Angeles, Los Angeles, CA

Relevant Courses: Methods of Applied Mathematics, Mathematical Methods of Physics, Linear Algebra, Electrodynamics, Computational Physics, Solid State Physics

SKILLS (HARD SKILLS: CAN BE TESTED)

- Proficient with Single, Multivariable Calculus, Linear Algebra, Probability and Statistics
- Proficient with Python, Mathematica, LaTeX
- Familiar with basic lab electronics (oscilloscopes, power supplies, volt/amp meters, etc.)
- Familiar with RC circuits design, Solidworks, Fusion360, C++, Microsoft Office Suite

PROFESSIONAL EXPERIENCE (IF NONE CONSIDER VOLUNTEER & EXTRACURRICULAR ACTIVITIES)

UPSILON LAB GROUP, LOS ANGELES, CA, OCTOBER 2019 TO MARCH 2020

LAB MANAGER

- Instructed a small group of three undergraduate students on a Python implementation of a Markov Chain Monte Carlo simulation for weighted coins and dies.
- Guided a group of four undergraduate students in comparing the efficiency of wind turbine blades via Python-operated simulations, then compared the simulations with small-scale 3D printed designs to assess theoretical predictions.
- Administered the overall operations of the laboratory, including day-to-day activities, workflows, and outreach opportunities.

UCLA, LOS ANGELES, CA, APRIL 2020 TO DECEMBER 2021

INTRODUCTORY LAB MEMBER

- Utilized an arduino that allowed the user to measure the speed of sound by using the arduino, a tube closed at one end, and simple Python code.
- Produced scintillation counters to calculate the decay lifetimes of atmospheric muons to verify previous experimental results.
- Piloted the creation of a Python Library to evaluate first and second order differential equations to solve dynamic Hamiltonian systems.
- Assisted students in safely completing their lab experiments and offered explanations of lab materials and procedures.

UNDERGRADUATE PROJECTS

- Assembled several 2D Ising and Potts models to analyze multi-state spin systems' time evolution.
- Piloted the creation of a Python module that was then utilized to diagonalize large square matrices.
- Utilized Euler's method, RK2, and RK4 to produce numerical solvers for first order differential equations.

ADDITIONAL INFORMATION

Interests: Hiking, 3D printing, working on project cars, CAD design, astrophotography, overclocking