David Kim

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EXPERIENCE

Laboratory of Particle Physics and Cosmology

Harvard University, Cambridge, MA – Research Intern

JUNE 2022 – AUGUST 2022

Developed event reconstructions for neutrino telescopes.

Physics and Math Tutoring

Tutor

SEPTEMBER 2022 - ONGOING

Private-tutored high-school students in AP Physics and Calculus.

Summer Science Mentorship Program

Newton, MA – Co-founder and Teacher

JUNE 2020 - AUGUST 2020

Co-founded and taught in a summer program to teach middle-schoolers science.

Ligerbots Tutoring Program, Newton, MA – *Tutor*

JUNE 2020 - JULY 2020

Mentored a kindergartener to help develop his social and academic skills.

SKILLS

- Python
- Java
- C++

LANGUAGES

- Proficient in Spanish
- Proficient in Korean

AWARDS

- Newton South High School Excellence in Science Award
- 3rd and 5th Place for Astronomy in Mass. State Science Olympiad
- Outstanding Brass Section in Mingus and Essentially Ellington High School Jazz Festivals

EDUCATION

Cornell University

Ithaca, NY – B.S. in Physics

ANTICIPATED MAY 2025

Coursework to date includes:

- Machine Learning, Python, Java, C++, Functional Programming (OCaml)
- Multivariable Calculus, Differential Equations, Linear Algebra
- Mechanics & Special Relativity, Electricity & Magnetism, Waves & Thermodynamics, Quantum Mechanics

Harvard University

Cambridge, MA – Summer Course

JUNE 2020 – AUGUST 2020 Cosmology and Relativity

PRESENTATIONS & PUBLICATIONS

International Cosmic Ray Conference Nagoya, Japan

AUGUST 2023

Gave a poster presentation on the neutrino simulation software I helped develop.

Prometheus: An Open-Source Neutrino

Telescope Simulation, Jeffrey Lazar, Stephan Meighen-Berger, Christian Haack, David Kim, Santiago Giner, Carlos A. Argüelles (2023). <u>arXiv:2304.14526</u> github.com/Harvard-Neutrino/prometheus