

Dylan Joseph R. Gonzales

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EDUCATION

University of the Philippines Baguio

Expected 2027

B.S. in Physics

GWA: 1.74 (1.0 highest, 3.0 passing, 5.0 failed)

Relevant Coursework: Fundamental Physics, Modern Physics, Mathematical Methods in Physics, Computational Physics, Theoretical Mechanics, Electromagnetic Theory, Electronic Physics, Quantum Mechanics.

HONORS AND AWARDS

College Scholar, UP Baguio

University Scholar, UP Baguio

DOST-SEI Undergraduate Merit Scholarship

Expected 2023–2027

RESEARCH EXPERIENCE

University of the Philippines Baguio

August 2025–Present

Apprenticeship, Machine Intelligence and Neural Dynamics Laboratory

In the midst of understanding the fundamentals of machine learning (ML), neural networks, and computational modeling. Currently doing projects about radiative transfer on planetary atmospheres and implementing ML techniques for more efficient calculations with the guidance of senior members and the laboratory head, Ian Jasper Agulo.

University of the Philippines Baguio

October 2024–August 2025

Apprenticeship, Plasma Science and Technology Research Group

Apprentice in Giovanni Malapit's Plasma Research Group, learning about plasma physics and the studies around it, such as the group's own atmospheric pressure plasma jet (APPJ) research—specifically studied how to optimize transition metal oxide-based electron transport layers in APPJ treatment simulation.

LABORATORY EXPERIENCE

Department of Physical Sciences, UP Baguio

Fundamental Physics Laboratory

Four semesters worth of laboratory coursework about physics fundamentals, doing experiments from kinematics and dynamics to basic electronic circuits, culminating with writing technical papers.

Department of Physical Sciences, UP Baguio
Electronic Physics Laboratory

A semesters worth of laboratory coursework about electronic physics, primarily arduino-based experiments on fundamental circuits applied to physical problems, together with data gathering and analysis projects.

ACTIVITIES

Research Center for Theoretical Physics, CVIF January 2026
Attendee, 2nd Jagna Space Encounters

Did hands-on-workshop on analyzing spectral information, particularly examining spectra of galaxies and active galactic nuclei. Went to talks about different astrophysical research being done in the Philippines and about the current landscape of the field in the country.

Siklab Pilipinas, Inc. October-November 2025
Fellow, AI for Asia

Became a part of a cohort of young leaders from ASEAN member states to learn about the development of Artificial Intelligence and its impacts especially to the region. Was honored as an outstanding fellow during the term.

NASA Exoplanet Science Institute, Caltech July 2025
Attendee, Sagan Summer Workshop & PROTO Workshop

Attended the Sagan Summer Workshop about exoplanet demographics. It focused on planet detection, their biases, and synthesizing results to understand planetary system architectures and inform future missions like the Habitable Worlds Observatory. Did hands-on-sessions on exoplanet occurrence rates and how to use astrometry in conjunction with other techniques to validate and characterize planets.

OUTREACH

College of Science, UP Baguio April 2024
Volunteer, Summer Institute in the Natural Sciences and Mathematics

Helped with SINSM event preparation and booth set-up of UP Physics Sphere as a Volunteer for the Department of Physical Sciences. Participated in Income-Generating Projects and taught participants about the BS Physics degree program of the University and the goals of the organization.

Zooniverse, Citizen Science Alliance since 2023
Volunteer, Galaxy Zoo

PROFESSIONAL AND ACADEMIC AFFILIATIONS

Member , UP Math-Physics Society	2026–Present
Member , UP SIKAT	2025–Present
Member , UP Physics Sphere	2024–Present
Member , Philippine Association of Liknayan Students	2024–Present
Member , International Association of Physics Students (via PALS)	2024–Present

TECHNICAL SKILLS

Programming: Python, MATLAB

Documentation/Typesetting: LaTeX, Markdown

Libraries: NumPy, SciPy, Matplotlib, VPython, Scikit-learn, Seaborn

Tools: Jupyter Notebook, Git, Overleaf, PyCharm, VS Code

MISCELLANEOUS

Languages: Filipino (Native), English (Full Professional), Japanese (Elementary)

Hobbies: Video Gaming, Archery, Chess