

NTPU x NVIDIA - Call for Proposal: Project Submission Guidelines

I. Project Purpose

NVIDIA and NTPU are collaborating to drive innovation and development in AI technologies in Taiwan. This initiative aims to promote cutting-edge AI research and applications by integrating NVIDIA's high-performance GPU computing resources with NTPU's diverse research teams, cultivating highly skilled AI talent, accelerating the development and implementation of AI technologies, and promoting interdisciplinary research.

II. Proposal Topics

We welcome innovative research proposals in the following fields, but not limited to:

- Generative AI Applications: Exploring innovative AI applications in music, visual arts, finance, law, and more.
- Large Language Models: Developing advanced natural language processing (NLP) technologies and exploring real-world applications.
- Physics-informed Neural Network (PINN): Combining physics principles with deep learning for use in aerospace, astronomy, fluid dynamics, electromagnetics, etc.
- Quantum Computing Simulation: Simulating quantum systems on classical computers to explore the potential of quantum computing.
- Pharmaceutical Development: Using AI to accelerate molecular drug design and protein structure prediction.
- Healthcare: Developing AI-assisted diagnostic and treatment systems to enhance medical outcomes.
- NVIDIA SDK-related Topics: Leveraging NVIDIA's SDKs such as NeMo, BioNeMo, PhysicsNeMo, CUDA Quantum, CLARA, and others.

III. Project PI Eligibility

- Principal Investigator (PI): Assistant Professor or higher at NTPU
- Co-PI: No specific restrictions

IV. Application Method

From June 1, 2025 (Sunday) to July 31, 2025 (Thursday) 11:59 PM, please complete the application form (attached) and email it to minitseng@gm.ntpu.edu.tw.

V. Review Criteria

The proposals will be reviewed by an NVIDIA review committee based on the following:

(I) High-Performance Computing Requirements and Use of NVIDIA SDK (40%)

1. Degree of demand for high-performance GPU computing
2. Innovative applications of NVIDIA SDK

(II) Project Impact (30%)

1. Potential contributions to Science, Engineering or Society
2. Application prospects of research outcomes

(III) Project Feasibility (30%)

1. Rationality of research methodology
2. Appropriateness of time and research allocation

VI. Resource Funding

Selected research projects will have the opportunity to receive up to one month of access to NVIDIA GPU high-performance computing resources, as well as technical guidance from the NVIDIA Solutions Architect (SA) team. During the project execution period, the SA team will provide technical support during business hours.

VII. Rights and Obligations

- (I) Share research progress reports
- (II) Submit a detailed final report within 2 months after the completion of the project
- (III) When publishing research outcomes, acknowledge NVAITC's participation in the Acknowledgments section. If NVAITC makes a significant contribution, the partner will be listed as a co-author.