

# NCHC End2End LLM Bootcamp

Aug 6-7, 2024

NCHC X OpenACC X NVIDIA

## NCHC End-to-End LLM Bootcamp

https://www.openhackathons.org/s/siteevent/a0CUP00000L45Bx2AJ/se000345



**Events** 

**Attendees** 

Mentors

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# NCHC END-TO-END LLM BOOTCAMP

August 6-7, 2024

Application Deadline: July 16, 2024

**Hybrid Event** 



## **Co-innovate with Developers**

Connect

Developers & Mentors

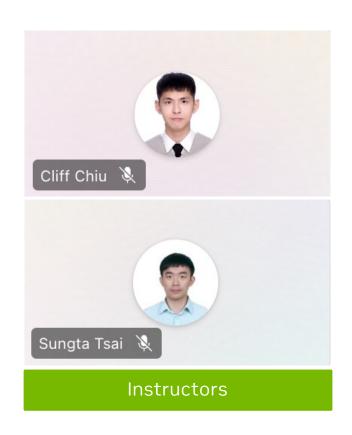
Co-innovate

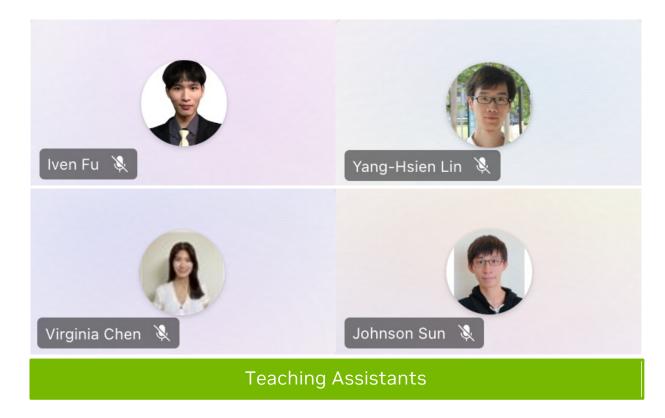
on Accelerated Platform

Celebrate

through Publication

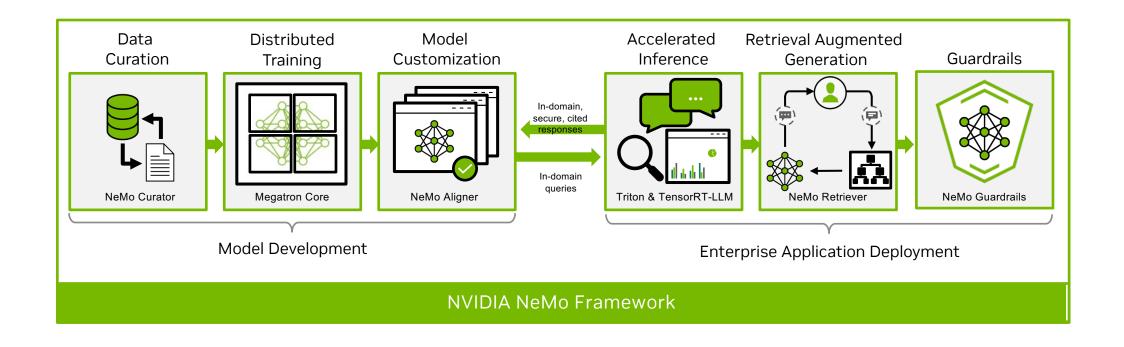
#### **Team Roster**



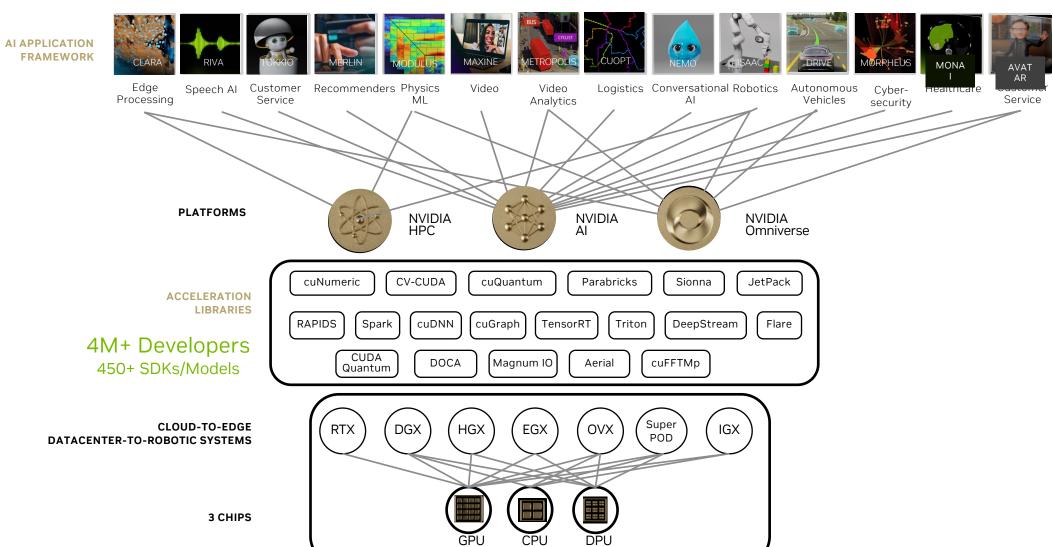


## **Building an End-to-End Generative Al**

Build, customize and deploy generative AI models with NVIDIA NeMo



#### **Platforms for Discovery**



#### **NCHC-NVIDIA Joint Lab**

https://github.com/nqobu/nvidia/tree/main

### Repository for NCHC-NVIDIA Joint Lab

- tutorials NVIDIA online courses/tutorials in AI/HPC
- 20210412 NVIDIA Techniques Sharing 2021
- 20210706 NCHC Techniques Sharing 2021
- 20211202 NVIDIA Techniques Update 2021
- 20211221 AI+HPC: 利用 NVIDIA Modulus 實踐 PINN 於物理模擬
- 20220415 NVIDIA Techniques Update 2022
- 20220530 NCHC-NVIDIA Techniques Sharing 2022
- 20220629 PINN 與 NVIDIA Modulus 實作訓練營
- 20221111 Quantum Computing Workshop / 量子計算模擬實作
- 20230413 NVIDIA Techniques Sharing 2023
- 20230517 NVIDIA Techniques Briefing: NVIDIA Federated Learning
- 20230525 AI for Science: NVIDIA Modulus 及 NVIDIA Omniverse 實作
- 20230727 N-Ways to GPU Programming Bootcamp / 多 GPU 程式設計訓練課程
- 20230821 NVIDIA Techniques Salon 2023: Programming the NVIDIA Superchip
- 20231207 NCHC Open Hackathon 2023
- 20240410 NCHC Quantum Computing Bootcamp 2024
- 20240506 Al for Science: NVIDIA Modulus, NVIDIA Omniverse, and NVIDIA Earth-2
- 20240508 NCHC Techniques Sharing 2024
- 20240626 NCHC AI for Science Bootcamp 2024 NVIDIA Modulus 物理模擬計算
- 20240806 NCHC End-to-end LLM Bootcamp 2024 NVIDIA NeMo 大型語言模型框架



## 2024 NCHC Open Hackathon Registration

https://www.openhackathons.org/s/siteevent/a0C5e000008dX2GEAU/se000298



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# NCHC OPEN HACKATHON

November 13, 2024 - December 04, 2024 Application Deadline: October 15, 2024 Hybrid Event





::: ★ ➤ 科研成果 ➤ 學研成果

#### 學研成果

日期

開始日期

結束日期

閣鍵字 閣鍵字

ex: 2019/01/01



2024.01.30

【2023 NCHC, NVIDIA, OpenACC 黑客松】-HPC、DPU及量子運算 加速成果



2024.01.30

【2023 NCHC, NVIDIA, OpenACC 黑客松】-大 氣科學應用加速成果



2024.01.30

【2023 NCHC, NVIDIA, OpenACC 黑客松】-人 工智慧應用加速成果

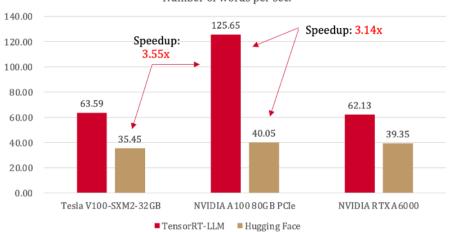
#### NCHC Speedrunning 團隊成員來自 國家高速網路與計算中心,將AI超大語言模型加速3倍!

\* NVIDIA Mentors: Anthony Chang, Cliff Chiu.

國科會推出的臺灣版ChatGPT已經初見成效,不僅擁有70億參數的模型,還進入了公部門應用討論階段。這款稱為可信任AI對話引擎(TAIDE)的模型是以繁體中文資料訓練而成,強調以臺灣文化為基底,具備臺灣特有的用語、價值觀和文化知識,能夠回答在地使用者的問題。

超大語言模型(LLM)具有強大的語言理解能力,但同時因為模型巨大,推論速度變成應用的挑戰之一,為了提供更便捷的服務,讓更多的使用者能夠利用這些廣泛的語言模型,團隊透過TensorRT-LLM對訓練過的模型進行優化,獲得3倍以上的加速效果。





benchmark

TensorRT-LLM 真的非常好用,僅利用軟體優化,竟然就把同樣的LLM模型加速3倍!迫不及待測試 H100,預期會有更多的加速效果。

- 國網中心NCHC Speedrunning 團隊

更多資訊請看:

https://github.com/nqobu/nvidia/raw/main/20231207/Team12.pdf



## **NVIDIA Developer Program**

NVIDIA 開發者計畫

#### **Program Benefits:**

#### **Tools**

- 550+ exclusive SDKs and models
- GPU-optimized software, model scripts, and containerized apps
- Early access programs

#### **Training**

- Research papers, technical documentation, webinars, blogs, and news
- Technical training and certification opportunities
- 1,000s of technical sessions from industry events On-Demand

#### Community

- NVIDIA developer forums
- Exclusive meetups, hackathons, and events

#### Special Program (Present to Jan 2024)

Join NVIDIA Developer program now, you will get one NVIDIA Training

#### Join the Community





## **Feedback Survey**

https://forms.office.com/r/F9eAqgv1Wy

Your feedback is valuable to us! Please take a moment to share your thoughts on this event. Your input will help us enhance future events. Thank you for participating!

