Department Of Computer Science & Engineering

NVIDIA AI Learning & Research Center

List of Events

SNo.	Name of Event	Date	Venue
1	Inauguration	08-06-2022 SHD HALL	
2	Faculty Training Program	24-Aug – 22 to 31- Aug-2022	AI LAB(MIC)
3	Students orientation program	21- Sept-2022	SHD HALL
4	Students' selection test	30 Sept-2022	All Lab (First Floor)
5	Students Training Program	12-Oct-2022- till date (Every Wednesday and Friday 2.30 to 5.00 PM)	Room Number-322

CHATTE NOIDA Institute of Technology & Management Department of Computer Science & Engineering

NVIDIA AI Learning & Research Center

1. Inauguration: - 8th June,2022

Inauguration Ceremony of NVIDIA AI Learning and Research Center at GL Bajaj Campus

Name of	Computer Science & Engineering
Department/	
Organizer	
Date and Time	8/6/2022
Venue	SHD Hall
Participant	Students, Faculty and Staff of GLBITM

Machine intelligence is the last invention that humanity will ever need to make." ~Nick Bostrom. This quote itself reflects the power of AI and ML. We are entering a new world. The technologies of machine learning, speech recognition, and natural language understanding are reaching a nexus of capability. The world of computing is going through an incredible change and to match the pace Department of CSE, GLBITM established an NVIDIA AI Learning and Research Center. It was a great and historic moment as the rocket man of India, Ex-ISRO chief Dr K. Sivan graced the occasion as chief guest. along with her. Mr Shridhar Garge Head of Strategy, Planning & Programs at NVIDIA, Mr Sanjay Makhija AI/DL Business Development Expert for Higher Education, Mr Abhishek Aggarwal fast-changing Info ways, Mr Manoj Kulshreshtha Vice President (Academic Alliance building infrastructure, workforce development and research & developments, including Kartikeya Agarwal CEO G. L. Bajaj group and Dr Manas Kumar Mishra Director GLBITM were also present as the esteemed guests. The event started with a speech by Mr Pankaj Agarwal who welcome Dr K. Sivan Ex-ISRO chief. He spoke about the importance of AI technology in every aspect of life. He said that the future of computing is AI and G. L. Bajaj is all set to keep pace with the fast-changing fulfill. He focused on three important milestones of the journey as Building infrastructure, workforce development and research & development which include collaboration with international universities. His vision

is to develop a pool of trained professionals, faculties and students who can provide sustainable solutions. Followed by this Dr Manas Kumar Mishra Director GLBITM welcomed Dr. K. Sivan. He expressed his views on the requirement of up skilling and reskilling. He discussed the importance of AI and how the education system needs to change to fulfill the upcoming requirements. He gave the details of NVIDIA DGX 100 and suggested that students and faculties should get maximum use of this.

Photo Gallery















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2. Faculty Training Program: -24th Aug, 2022 to 31st Aug, 2022

Name of Department/ Organizer	Computer Science & Engineering
Date and Time	24 th AUG,2022 to 31 st AUG-2022
Venue	AI LAB(MIC)
No. Of Participants	12

NVIDIA DGXA100 TRAINING was organized by the Department of CSE, GLBITM Gr. Noida on 24 - 30 August 2022. The objective of the Programme was to learn DGXA100 server and utilize this world's fastest server. There were selected faculty members who were participating in this learning event. The Programme was Initiated by NVIDIA Team with the formal introduction of Sever and work with respect to deep learning. It was 5 days of Training, each day has different learning objectives like in day 1, Trainer started with the simple question where are NVIDIA & DGX A10? Then in 2nd session of day 1, he explained services that NVIDIA had like NVIDIA deep Stream, NVIDIA RIVA, NVIDIA NEMO, TENSOR RT etc.







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3. Students orientation program: - 21st Sept,2022

Orientation Program on NVIDIA DGX A-100

Name of Department/	Computer Science & Engineering
Organizer	
Date and Time	21st September 2022
Venue	SHD Hall, GLBITM

An Orientation Program from the NVIDIA team on DGX A-100 was organized by the Department of CSE, GLBITM, Greater Noida on 21-09-2022 from 2.45 to 4.45 PM. The objective of this orientation program was to provide the entry process for of a student (Third Year) to work on the DGX A-100 server to develop real-life projects. The program was initiated by Prof. (Dr.) Sansar Singh Chauhan, HOD Computer Science & Engineering. Prof. (Dr) Rajiv Kumar and Dr Amit Wadhwa coordinated the Programme. Mr Abhishek Kumar, CEO & Founder of Venture chairman and Mr Naresh Gupta Vice President of New Age Technologies started the orientation program. They discussed the applications of the Artificial Intelligence systems which can be developed using DGX A-100 server. Approximately more than 200 Students participated in this event.







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Students' selection test:- 30th Sept,2022

NVIDIA selection test has been organized on 30 Sept- 2022. Appr. 171 & 175 students participated in slot 1 and slot 2. A detailed student list is attached here. The test has been conducted in online mode in presence of Invigilation from GLBITM faculty members.



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4. Students training Program: - 12th Oct 2022

Student's training programs were started on 12th Oct 2022. The program's main objective was to teach participants how to use the DGXA100 server, which is in the fastest server list in the world. Participants in this educational activity were chosen, students. The NVIDIA Team officially launched the program and described how the server operated in relation to deep learning. Every week, training sessions are scheduled for Wednesday and Friday from 3 to 5 p.m. The trainer began by asking, "What is NVIDIA & DGX A100?" Then in a different session, a thorough explanation of NVIDIA deep Stream, NVIDIA RIVA, NVIDIA NEMO, TENSOR RT, and other technologies was launched. Approximately 78 students are attending this training program.



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List of Students participating in NVIDIA Training

S.	RollNo	No	Branch
No. 1	2001020100059	Name of Student	CSE
	2001920100058	Aryan Tiwari	CSE
2	2001920100182	Naman Rana	
3	2001920100184	Neeraj Kumar Maurya	CSE
4	2001920100208	Prince Chaudhary	CSE
5	2001920100216	Priyesh Singh	CSE
6	2001920100234	Rishu Tiwari	CSE
7	2001920100301	Swapnil Tiwari	CSE
8	2001920100303	Tanaya Biswas	CSE
9	2001920130015	Akash Mangal	CSE
10	2001920100030	Aman Gupta	CSE
11	2001920100267	Shashank Kumar	CSE
12	2001920100202	Prakhar Singh	CSE
13	2001921520012	Anurag Pathak	CSE - AI
14	2001921520013	Aparnesh Shukla	CSE - AI
15	2001921520052	Shailesh Mittal	CSE - AI
16	2001921520056	Shri Krishna Sundram	CSE - AI
17	2001921520057	Shubham Kumar	CSE - AI
18	2001921520064	Utkarsh Tripathi	CSE - AI
19	2001921520065	Vansh Gupta	CSE - AI
20	2001921530003	Adarsh Kumar	CSE - AIML
21	2001921530006	Akhil Kumar	CSE - AIML
22	2001921530007	Akshat Kushwaha	CSE - AIML
23	2001921530010	Amishika Batra	CSE - AIML
24	2001921530011	Amit Kushwaha	CSE - AIML
25	2001921530015	Anurag Yadav	CSE - AIML
26	2001921530016	Ashutosh Kumar Singh	CSE - AIML
27	2001921530017	Ayush Ansh	CSE - AIML
28	2001921530020	Dawood Aleem	CSE - AIML
29	2001921530022	Deepanshu Verma	CSE - AIML
30	2001921530030	Kushagra Saxena	CSE - AIML
31	2001921530032	Manya Rani	CSE - AIML
32	2001921530036	Muskan Yadav	CSE - AIML
33	2001921530038	Pratyush Singh Chauhan	CSE - AIML

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34	2001921530043	Rahul Yadav	CSE - AIML
35	2001921530044	Rakesh Baranwal	CSE - AIML
36	2001921530045	Rishabh Yaduwanshi	CSE - AIML
37	2001921530048	Sakshi Singh Parihar	CSE - AIML
38	2001921530053	Shudhanshu Maurya	CSE - AIML
39	2001921530056	Tanveer Alam	CSE - AIML
40	2001921530062	Vinay Kumar Singh	CSE - AIML
41	2001921530065	Yashank Gupta	CSE - AIML
42	2001921530060	Vaibhav Shukla	CSE - AIML
43	2001921530057	Tarun Chauhan	CSE - AIML
44	2001920130024	Ankit Raj	IT
45	2001920130029	Anshuman Dubey	IT
46	2001920130037	Ashutosh Gaurav	IT
47	2001920130060	Gaurav Jain	IT
48	2001920130066	Harsh Sharma	IT
49	2001920130078	Khushi Gupta	IT
50	2001920130081	Manas Tiwari	IT
51	2001920130085	Mayank Attri	IT
52	2001920130088	Mohammad Junaid	IT
53	2001920130097	Piyoush Jaiswal	IT
54	2001920130103	Prakhar Singh	IT
55	2001920130124	Rohit garg	IT
56	2001920130126	Rushil choubey	IT
57	2001920130161	Supriya Kumari	IT
58	2001920130163	Suyash Verma	IT
59	2001920130169	Tanvi Varshney	IT
60	2001920130172	Tushar Mishra	IT
61	2001920130173	Udit Soni	IT
62	2001920130176	Utkarsh Somvanshi	IT
63	2001920130177	Utkarsh Tyagi	IT
64	2001920130179	Vaibhav Krishna	IT
65	2001920130182	Vanshika Jaiswal	IT
66	2001920130183	Vibhor Chauhan	IT
67	2001920130185	Vijay Laxmi Kumari	IT
68	2001920130190	Vishal Shahi	IT
69	2001920130192	Vivek	IT
70	2001920130195	Yash Sisodiya	IT
71	2001920130196	Yashaswini Singh	IT
72	2001920130197	Yashi Tripathi	IT





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73	2001920310059	Dikshant Sharma	IT
74	2001920310081	Krishna	IT
75	2001920310086	Lakshita singh	IT
76	2101920139010	Shekhar Sharma	IT
77	2101920130132	Sanchay Shukla	IT
78	2001920400002	Abhinav Mishra	ME
79	2001920400008	Ankur Sharma	ME
80	2001920400028	Rohit Kumar Maury	ME



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Benefits of NVIDIA AI Learning & Research Center

NVIDIA is a leading company in providing hardware and software solutions for deep learning and artificial intelligence. NVIDIA GPUs are widely used for training deep learning models because they can perform parallel computations much faster than traditional CPUs. This allows data scientists and researchers to train models much more quickly and efficiently. In addition to GPUs for data centers and desktops, NVIDIA also provides GPU solutions for laptops and even mobile devices. This means that deep learning and AI applications can run on a wide range of devices, enabling a variety of use cases. As you mentioned, NVIDIA GPU deep learning is also available on cloud services from major providers such as Amazon, Google, IBM, and Microsoft. This makes it easy for businesses and researchers to leverage NVIDIA's powerful technology without having to invest in their own hardware. Overall, the advancements in deep learning and AI are transforming the world of computing and enabling new applications and use cases that were previously impossible. NVIDIA's hardware and software solutions are playing a major role in driving this transformation.

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Figure: Server Room

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NVIDIA DGX A 100 SPECIFICATIONS

System Specifications		
GPU	8X NVIDIA A 100 TENSOR	
GPU MEMORY	320 GB TOTAL	
PERFORMANCE	5 Peta FLOPS AI 10 PetaOPS INTS	
NVIDIA NV	6	
SWITCHES		
SYSTEM	6.5 KW MAX	
POWER USAGE		
SYSTEM	1 TB	
MEMORY		
NETWORKING	8X Single port Mellanox connectx-6 VPI	
	200GB/S HDR InfiBand	
	1xDual port mellianox	
	connectX-6 vpi	
	10/25/50/100/200 gb/s	
	Ethernet	
STORAGE	OS: 2 x 1.92 TB M-2 NVME drives	
	Internet storage 15 TB	
	(4x3.64 TB) U-2 NVME-drive	

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Benefits of NVIDIA AI Learning & Research Center for students

a. Provides students with practical experience

A scientific lab is a location where students may receive hands-on experience with experiments they've studied in books or through their professors. This gives them an understanding of how an experiment is carried out and what the findings may be. They also get the opportunity to investigate other strategies for carrying out the experiment.

b. Assists students in developing their own ideas

A scientific lab at Ameya, one of the finest schools in Vizag, allows pupils to develop their own ideas and make them practical in the real world. If a student has an idea, they may attempt to execute it properly in the lab and make it successful. This allows them to determine whether or not their ideas are feasible.

c. It promotes curiosity

Students often have an intrinsic interest in the world around them. The science lab fosters curiosity by allowing pupils to explore and experiment with their environment They improve their thinking abilities and acquire information about the world around them as they research and discover new things.

d. Encourages inventiveness

Our pupils in a science lab are encouraged to develop hypotheses and experiments based on a certain theme. This teaches children how to solve issues and think critically. It also stimulates creativity since students may utilize their imagination during experimentation.

e. Self-directed learning

Ameya's science lab classrooms enable pupils to guide their own learning since the activities are frequently open-ended. Students get the chance to put ideas to the test, ask questions, and make observations. They may then use the data from these tests to future research or initiatives.

f. Aid in memory improvement

Experimenting in a science lab helps pupils acquire superior memory skills. Experimenting always requires the active participation of both hands and intellect, as opposed to rote memorizing of data. When pupils grasp ideas, there is no need for them to recall what they have read or heard.

g. Students become more focused

When students participate in experiments, they become more concentrated than when they conduct theoretical study. This enhances focus and aids in the development of analytical abilities.





NVIDIA, AUDI Partner to Put World's Most Advanced AI Car on Road by 2020



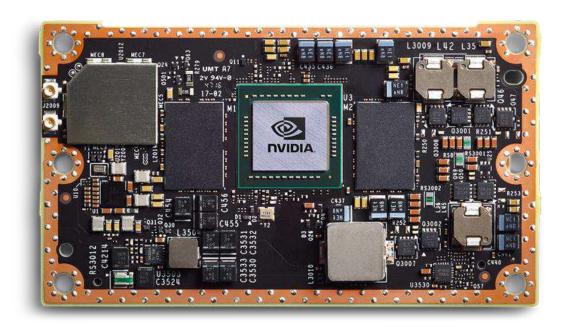
Using Recurrent Neural Networks for Dynamic Facial Analysis



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Mercedes-Benz and NVIDIA Announce Partnership for AI Car Technology

INTELLIGENT MACHINES



NVIDIA JETSONTM

Embedded AI and Deep **Learning** for Intelligent Devices. High-performance, low-energy computing for deep learning and computer vision make $\frac{\text{NVIDIA Jetson}^{\text{TM}}}{\text{NVIDIA Jetson}}$ the ideal solution for compute-intensive embedded applications.

- Features NVIDIA Maxwell[™] architecture cores, delivering over 1 teraflops of performance, 64-bit CPUs, and 4K video encode/decode capabilities
- Unmatched power efficiency at under 10 watts

Project developed using NVIDIA



Robotics and Smart Factories



Intelligent Video Analytics (IVA)