Workshop on "The Potential Use of AI and ML in the Field of Particle Accelerators"
Inter-University Accelerator Centre, New Delhi
November 4-5, 2024

REGISTRATION (4th November 2024, Monday)		
Date	**Time**	**Location**
4-Nov-24	8:30 AM to 9:30 AM	Registration (Venue: Lounge Area, Seminar Hall, Main Laboratory Complex, IUAC)

PROGRAM SCHEDULE: DAY-1 (4 Nov 2024, Monday)			
Time	**Speaker**	**Organization**	**Presentation Title**
9:30 AM	Dr. J. Antony	IUAC	Welcome Address & Lighting Lamps
9:40 AM	Prof. A. C. Pandey	Director, IUAC	Opening Remarks and Overview
9:55 AM	Dr. Utpal Chakraborty	Vivekananda Institute for Professional Studies	Keynote Talk
10:30 AM	Prof. Alex James	Dean, Digital University , DUK, Trivandrum	Guest of Honor Address
10:45 AM	Technology Transfer Agreement Exchange of IUAC AI Products to Scientech Technologies Pvt. Ltd, Indore		
10:50 AM	Dr. J. Antony	IUAC	Vote of Thanks
11:00 AM	High Tea		
Session-I			
11:30 AM	Talk-1: Prof. Alex James	Dean, Digital University , DUK, Trivandrum	In-memory Chips for Edge AI Processing
12:15 PM	Talk-2: Prof. Sumantra Datta Roy	IIT Delhi	Transformers & LLMs
1:00 PM	Lunch Break		
Session-II			
2:00 PM	Talk-3: Dr. Surendra Yadav	RRCAT	AI Techniques and Applications for Indus Accelerator facility
2:45 PM	Talk-4: Dr. Deepak Mishra	IIST, Trivandrum	Deep Leaning demystified : CNNs for Image classification and RNN for time series forecasting
3:30 PM	Tea Break		
Session-III			
4:00 PM	Talk-5: Dr. J. Antony	IUAC	Power of Parallel Computing for AI: Presentation using Param Rudra Supercomputer &other GPUs
4:45 PM	Talk-6: Mr. S. K. Jain	BARC	Remote Server-Clients Design-Hardware & Software at BARC
5:30 PM	Tea Break		
6.00 PM - 7.00 PM	Dr. Vidur Mahajan	Special Evening Talk	Health care using AI on Medical Imaging Applications

PROGRAM SCHEDULE: DAY-2 (5 Nov 2024, Tuesday)			
Time	**Speaker**	**Organization**	**Presentation Title**
Session-IV			
9:30 AM	Talk-7: Dr. J. Antony	IUAC	IoT & AI/ML Activities at IUAC
10:15 AM	Online Talk-8: Ms. Pranita Mahajan	SVNIT, Surat	Prompt Engineering/ChatGPT
11:00 AM	Tea Break		
Session-V			
11:15 AM	Talk-9: Mr. Pritam Prakash Shete	BARC	Introduction to Large Language Models: from foundations to Real World Applications
12:00 PM	Talk-10: Dr. Dhruv Chandel	MathWorks	Reinforcement Learning - Feedback Controls
12:45 PM	Visit to Param Rudra, IUAC Super Computing facility		
1:15 PM	Lunch Break		
Session-VI			
2:15 PM	Online Talk-11: Dr. Nileshchandra Pikle	IIIT Nagpur	GPU Computing - Architecture, Applications & Programming Strategy
3:00 PM	Practical Demonstrations of AI Experiments on TinyML, LSTM & LLM by Research Associate/Students		
4:00 PM	Tea Break		
4:30 PM	Open Discussion & Concluding Remarks - Convened by Organizing Committee [Coordinators: Dr. J. Antony/ Mr. Rajeev Mehta] Special Invitee: Director, IUAC		