

# Workshop on Artificial Intelligence, Machine Learning & Computational Intelligence Inter University Accelerator Centre, New Delhi

**July 27-28, 2021, Online**

## PROGRAM SCHEDULE: DAY-1

Date	Time	Location
27 July, 2021	9:00 AM to 6:10 PM	Virtual

Time	Presenter	Organization	Presentation Title
8:30 AM			Login to the Workshop Starts
9:00 AM	Dr. J. Antony	IUAC	Beginning of the Workshop
9:05 AM	Prof. A. C. Pandey	Director, IUAC	Opening Remarks and Overview of IUAC
9:20 AM	Dr. Nandini Kannan	Exe. Director, IUSSTF	Inaugural Talk: “The AI revolution: Enabling and Advancing Discoveries in Science”
10:05 AM	Dr. B.K. Sahu	IUAC	Vote of Thanks
10:10 AM			Break
			<b>Session-1</b>
		Session Chair	<b>Dr. Sumit Mookerjee, IUAC New Delhi</b>
10:20 AM	Prof. Seshan Srirangarajan	IIT Delhi	Machine Intelligence and Learning
11:00 AM	Prof. Vineeth N Balasubramanian	IIT Hyderabad	Introduction to Machine Learning & Convolutional networks
11:40 AM	Prof. A. P. Prathosh	IIT Delhi	Learning from Unlabelled Data
12:20 PM	Prof. Rajendra Pamula	IIT Dhanbad	Machine Learning for Wireless sensor network
1:00 PM			Lunch Break

			<b>Session-2</b>
		Session Chair	<b>Dr. G. Rodrigues, IUAC New Delhi</b>
2:00PM	Prof. Arijit Mondal	IIT Kharagpur	Computation hungry deep learning models into Microcontrollers & embedded systems
2:40 PM	Prof. Vinay Namboodiri	IIT Kanpur	Introduction to Multimodal AI & Applications
3:20 PM	Prof. Balaraman Ravindran	IIT Madras	Reinforcement learning
4:00 PM			Tea Break
			<b>Session-3</b>
		Session Chair	<b>Dr. S. Muralithar, IUAC New Delhi</b>
4:10 PM	Mr. Rohit Prajapati	DigiToad Technologies	Sensor Intelligence, Adding Edge AI to existing IoT Systems, Vibrational Analysis using Edge AI
4:50PM	Dr. Diptikalyan Saha	IBM India	Introduction to NLP & Ensuring Trustworthy AI through AI model Testing
5:30 PM	Mr. Sivhari Nandakumar	NPOL, DRDO Lab, Trivandrum	Python tools on Linux: Powerful Python tools for ML
6:10 PM			Break
		Session Coordinator:	<b>Dr. J. Antony, IUAC New Delhi</b>
6:20 PM	Mr. Arun Kumar L.	Raven Protocol, Bangalore	Practical AI applications: demonstrations/talk of deploying TinyML working models connected to embedded sensors

## PROGRAM SCHEDULE: DAY-2

Date	Time	Location
28 July, 2021	9:00 AM to 6:00 PM	Virtual

Time	Presenter	Organization	Presentation Title
			<b>Session-4</b>
			<b>Dr. Gopal Joshi, BARC, Mumbai</b>
9:00 AM	Prof. R.K. Shyamasundar	IIT Mumbai	IoT: Security Challenges and the Role of Machine learning for Security Enforcement
9:45 AM	Prof. Vijay Janapa Reddi	Harvard, USA	TinyML and its applications
10:30 AM	Dr. Venkata N. Inukollu	Purdue USA	TensorFlow and Keras
11:15 AM			Tea Break
			<b>Session-5</b>
			<b>Sh. Pravin Fatnani, RRCAT, Indore</b>
11:30 AM	Dr. Luigi Serio	CERN	Machine Learning-Based Availability and Reliability Assessment
12:15 PM	Prof. Jayadeva	IIT Delhi	Learning to find the needle in a haystack
1:00 PM			Lunch Break
			<b>Session-6</b>
			<b>Dr. Alpana Rajan, RRCAT Indore</b>
2:00 PM	Prof. Kaushik Saha	IIT Delhi	Swarm Intelligence System for Detection of Cyber Attacks on IoT Clusters
2:45PM	Prof. Vipul Arora	IIT Kanpur	Machine learning for Physics, Generative Machine Learning for Spin Systems in Statistical Physics
3:30 PM	Mr. Dominik Vilsmeier	GSI, Germany	ML-based correction methods for IPM space-charge distortion
4:15 PM			Tea Break
			<b>Session-7</b>
			<b>Prof. A.C. Pandey, IUAC New Delhi</b>
4:30 PM	Mr. Samrit Kumar Maity	CDAC, Pune	Convergence of HPC and AI - HPC as compute backbone to AI workload
5:15 PM	Mr. Surendra Yadav	RRCAT, Indore	Application of Modified Real Coded Genetic Algorithm for RRCAT Accelerators
5.45 PM	Open discussion & Concluding remarks - convened by Organizing Committee AIMLCI-'21 [Coordinators: <b>Dr. G. Rodrigues / Dr. B. K. Sahu</b> ]		