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Activity Report of One day hands on workshop

# "Innovations in Robot Technology" Conducted on 20/10/2023

Following the kind approval by our respected institute Director, The Centre for Artificial Intelligence has successfully conducted a one day hands on workshop on "Innovations in Robot Technology" on 20/10/2023. The resource person for the workshop was Mr. Aditya Marathe, CEO and founder of Nugenix Robotics, Maharashtra, india. Under the supervision of the workshop convener Dr. Rajni Ranjan Makwana, Coordinator of Centre for Artificial Intelligence (CAI), the workshop was coordinated by Dr. Anshika Srivastava, Asst. Professor, CAI and Dr. Pawan Dubey, Asst. Professor, CAI. This workshop was designed primarily to expose our department's students to robotics and its varied uses in various industrial operations. The workshop also aimed to highlight the industrial needs from Robotics Engineers as well as how the robotics business is thriving in the nations and overseas. Moreover, the notable features of the talk are presented below:

- 1. In the beginning of the workshop, the students were introduced to robotics and at what different places the robots can be deployed for serving mankind.
- 2. Further, considering the increasing interest of the consumers in service robots, the robotics market scenario was demonstrated.
- 3. After the presentation, anatomy of the robotics was discussed by providing the live demonstration with the robots, which have very limited availability in India such as Husky, Kinova 7 DOF Arm with Gripper, Turtleboat 4 and Haptic Devices.
- 4. The **Husky Robot**, which is equipped with GPS, IMU, LIDAR, and a Camera Depth Sensor, and Kinova's newest Gen3 7 DOF Arm with Gripper, are used to demonstrate object handling by robots.
- 5. The **Turtlebot4** was displayed in the ROS Environment to show the type of data sensed by a robot when detecting objects.
- 6. Following that, a demonstration of a **Haptic Device** was shown to operate the robots remotely.
- 7. Furthermore, the resources and newest breakthroughs in Robotics were provided to urge our students to plan their future research internships and professions in the Robotics domain.

The copy of the approval is attached in **Appendix 1**. The list of attendees participated is attached in **Appendix 2**. Feedback of the program from the participants are attached in **Appendix 3**. Finally, the **glimpses** are presented in **Appendix 4**.

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Appendix: 1

# Madhav Institute of Technology & Science, Gwalior

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20/10/2023

#### NOTE-SHEET

Centre for artificial Intelligence is going to organize a one day hands on workshop on "Innovations in Robot Technology" on 20/10/2023. We are honored to have Mr. Aditya Marathe, Chief Executive Officer of Nugenix Robotics, Maharashtra, as the distinguished speaker for this workshop. It is requested to kindly give permission to organize the workshop at conclave centre from 4 P.M. onwards.

Dr. Anshika Srivastava Coordinator or. Pawan Dubey

Or. R. R. Singh Convener

Requested for kind permission

Dr. R.K. Pandit DIRECTOR

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#### Appendix 2

#### Attendees of the workshop **Students**

Name	Roll number		Email id	Semeter	Branch
Nancy gupta		41	nancygupta0911@gmail.co m	1	AIML
Harshit Kudaliya		32	23ai10ha32@mitsgwl.ac.in	1st	AIR
Yuvraj Shukla		77	23am10yu77@mitsgwl.ac.in	1 st	AIML
Ashish Kumar Sahu	0901AM231016		pcs883331@gmail.com	1	AIML
kartikey tiwari	0901AI231033		23ai10ka33@mitsgwl.ac.in	1	AIR
Harsh sharma		31	harsharma2029@gmail.com	1	AIR
Suhanee Anand	0901AI231068		23ai10su68@mitsgwl.ac.in	1	AIR
Ajay Patidar	0901A1231005		23ai10aj5@mitsgwl.ac.in	1	AIR
Yash sharma		76	yasharma1710@gmail.com	1st	AIML
Shivanshu gupta		61	shivanshugupta005@gmail. com	1	AIML
Himanshu muhare		28	himanshumuhare@gmail.co m	1	AIML
Saurabh solanki		58	sosaurabh571@gmail.com	1	AIML
Devendra kushwah		25	23ai10de25@mitsgwl.ac.in	1	AIR
Bhumika Sengar	0901Al231021		sengarbhumika29@gmail.co m	1	AIR
Tanush Kirar		67	23am10ta67@mitsgwl.ac.in	1st	AIML
Vivek gaur	0901Al231075		Vivekgaur9575@gmail.com	1st semester	AIR
Armaan Saxena	0901AI231014		23ai10ar14@mitsgwl.ac.in	1	AIR

#### **Attendee: Faculties Members**

S.No.	Name
1	Dr. Rajni Ranjan Singh Makwana,
2	Dr. Pawan Dubey
3	Dr. Anshika Srivastava
4	Mrs. Hemlata Arya

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#### Appendix 3

#### Feedback by the Students

Timesta mp	name	Roll Number	Email ID	Semeste r	Branch	How would you rate the organizat ion?	How would the event help you with new learnings or knowled ge?	How would you rate the event interactiv eness?	
10/20/20 23 20:51:50	Nancy gupta	41	nancygu pta0911 @gmail.c om	1	AIML	Good	Good	Good	No
10/20/20 23 20:51:53	Harshit Kudaliya	32	23ai10ha 32@mits gwl.ac.in	1st	AIR	Average	Good	Good	-
10/20/20 23 20:52:33	Yuvraj Shukla	77	23am10y u77@mit sgwl.ac.i n	1 st	AIML	Very good	Very good	Very good	Special thanks to Anshika mam and Pawan sir to organise this wonderful session
10/20/20 23 20:52:37	Kumar	0901AM 231016	pcs8833 31@gma il.com	1	AIML	Good	Good	Very good	No
10/20/20 23 20:53:48	kartikey tiwari	0901AI2 31033	23ai10ka 33@mits gwl.ac.in	1	AIR	Good	Very good	Very good	no
10/20/20 23 20:58:14	Harsh sharma	31	harshar ma2029 @gmail.c om	1	AIR	Very good	Very good	Good	Have some fun activity for us so we

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									can learn and enjoy as well as
10/20/20 23 21:03:49	Suhanee Anand	0901AI2 31068	23ai10su 68@mits gwl.ac.in	1	AIR	Good	Good	Good	We desire more fun activities and quizes.
10/20/20 23 21:04:35	Ajay Patidar	0901A12 31005	23ai10aj 5@mitsg wl.ac.in	1	AIR	Very good	Good	Good	Event should be precise
10/20/20 23	Yash		yasharm a1710@ gmail.co			Very	Very	Very	Today's session was great got to know various new and upcoming requireme nts and leads in robotics and functionali ties of robotic departme nt, even though the session was organized brilliantly i just want to suggest that the presentati on files of
21:24:19	sharma	76	m	1st	AIML	good	good	good	the

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									session/w orkshops should be provided to attendant s so that they can recall the important and useful topics from it, it was great session overall
10/20/20 23 21:31:15	Shivansh u gupta	61	shivansh ugupta00 5@gmail .com	1	AIML	Very good	Very good	Very good	No
10/20/20 23 22:21:14		28	himansh umuhare @gmail.c om	1	AIML	Very good	Very good	Very good	Very good class keep it up
10/20/20 23 22:24:13	Saurabh solanki	58	sosaurab h571@g mail.com	1	AIML	Very good	Very good	Very good	Fantastic experien ce
23	Devendr a kushwah	25	23ai10de 25@mits gwl.ac.in	1	AIR	Good	Very good	Very good	Amazing session
	Bhumika Sengar	0901AI2 31021	sengarbh umika29 @gmail.c om	1	AIR	Good	Average	Good	No
10/21/20 23 1:08:51	Tanush Kirar	67	23am10t a67@mit sgwl.ac.i n	1st	AIML	Good	Very good	Good	No

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10/21/20 23 7:57:24	Vivek	0901AI2 31075	Vivekgau r9575@g mail.com	1st semester	AIR	Very good	Very good	Very good	This is my first workshop .this event motivate me towards robotics.T HANKS
10/21/20 23 10:39:54	Armaan	0901AI2 31014	23ai10ar 14@mits gwl.ac.in	1	AIR	Very good	Very good	Very good	Event was good

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Appendix 4

# **Glimpses**



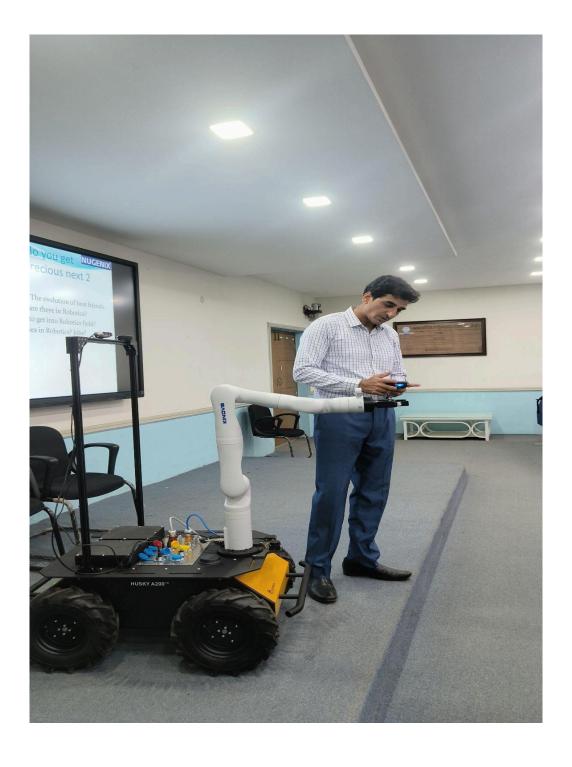
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Dr. Anshika Srivastava

Asst. Professor, Centre for AI

Coordinator

Dr. Pawan Dubey

Asst. Professor, Centre for AI

Coordinator

Dr. Rajni Ranjan Singh Makwana

Coordinator, Center for AI

Convener

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