

ATAL workshop on Robotics: Advances and Applications



Report

Faculty Development Programme on
“Robotics: Advances and Applications”

Maharaja Agrasen Institute
of Technology, Rohini, Delhi

23rd to 27th Aug 2021




AICTE TRAINING AND
LEARNING ACADEMY

ATAL workshop on Robotics: Advances and Applications


“ROBOTICS: ADVANCES AND APPLICATIONS”


5-Days AICTE sponsored workshop was conducted from 23th to 27th August 2021 in which more than 100 participants from different parts of the country participated.


The speakers for the 5-day workshop on “ROBOTICS: ADVANCES AND APPLICATIONS” were:

1	Mr. Rajeevlochana G. Chittawadigi	 <p>Asst. Professor, Dept. of Mech Engg., Amrita School of Engg (Amrita Vishwa Vidyapeetham University), Bangalore, India: Pursuing PhD (part-time) at IIT Delhi</p> <p>Education MS (Research) in Mechanical Engineering From: IIT Delhi, New Delhi, India</p> <p>M.Tech. in Mechanical Engineering From: MNNIT Allahabad (formerly MNREC)</p>
2	Prof. S. K. Saha	 <p>Professor, Mechanical Engineering, IIT Delhi</p> <p>Education Ph.D., McGill University, Canada M. Tech., Indian Institute of Technology Kharagpur B. E., Regional Engineering College (Presently, National Institute of Technology) Durgapur</p>
3	Dr. Ekta Singla	 <p>Ekta Singla, is serving as Associate Professor of the Mechanical Engineering Department at IIT Ropar</p> <p>Education: PhD., Indian Institute of Technology Kanpur, India, 2010 M.Tech., Thapar University, Punjab, India, 2002 B.Tech., Punjab Technical University, India, 2000</p>


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4 Dr. Vijay Kumar Dalla	
	<p>Dr. Vijay Kumar Dalla. Assistant Professor. Department of Mechanical Engineering</p> <p>EDUCATION</p> <ul style="list-style-type: none">• PhD Robotics, IIT Roorkee 2016• M.Tech., Materials Sci. IIT Bombay 2008• BE Mechanical, Govt. Engg. College Bilaspur, Guru Ghasidas University (now Central University), 2006


5 Prof. Sunita Chauhan	
	<p>Sunita Chauhan, PhD, DIC (Lon) - Medical Robotics Professor, Dept. of Mechanical & Aerospace Engineering and Director, Robotics & Mechatronics Engineering Program, (2012-20), Monash University, Clayton Campus, AUSTRALIA</p> <p>EDUCATION</p> <ul style="list-style-type: none">• Master of Technology (M.Tech.), Instrumentation and Controls, Bio Medical Instrumentation, National Institute of Technology, Kurukshetra, India, (Prev. R.E.C.K).• Doctor of Philosophy (Ph.D), Medical Robotics, Imperial College of London.


6 Mr. Nagesh Bakshi	
	<p>Nagesh Bakshi is Chairman & Managing Director at Bakshi Mark Pvt. Ltd. and Krab Infotech Pvt Ltd</p> <p>CEO, Bakshi Enterprises, New Delhi</p>

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7	Mr. Usman Ali	
		Usman Ali is Didactic Trainer, Festo Didactic India, Noida, Uttar Pradesh, India

8	Mr. Rahul Verma	
		Rahul Verma is Psychologist, Mindtribe (Dr. Prerna Kohli and Associates) EDUCATION <ul style="list-style-type: none">• Master of Arts: Psychology with specialization in Clinical Psychology, Indira Gandhi National Open University, 2019• UGC NET qualified (2018, 2019)

9	Prof. Pushparaj Mani Pathak	
		Pushparaj Mani Pathak is Professor in Robotics and Control Laboratory of Mechanical & Industrial Engineering Department at Indian Institute of Technology, Roorkee, India EDUCATION <ul style="list-style-type: none">• Ph.D., Indian Institute of Technology, Kharagpur 2005• M.Tech, Indian Institute of Technology, Kanpur 1998• B.Tech ,National Institute of Technology, Calicut 1988

10	Prof. R. S. Walia	
		Prof. R.S. Walia is Professor & Head of Department of Production and Industrial Engineering, Punjab Engineering College (Deemed to be University), Chandigarh, India EDUCATION Ph.D., Indian Institute of Technology, Roorkee 2006

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The schedule of the workshop was as below:

	Monday, 23 rd Aug 2021	Tuesday, 24 th Aug 2021	Wednesday, 25 th Aug 2021	Thursday, 26 th Aug 2021	Friday, 27 th Aug 2021
10:00 - 11:30 AM	Inauguration	Robot Kinematics (Robo Analyzer)	Collision Free Trajectory	Customised Conveying Solutions with Robotic Palletization	AI in Robotics
	Introductory Speech: Prof. Neelam Sharma ATAL Introductory Session	Mr. Rajeevlochana G. Chittawadigi	Dr. Vijay Kumar Dalla	Mr. Nagesh Bakshi	Dr. Vijay Kumar Dalla
11:30-12:00 AM	Tea Break	Tea Break	Tea Break	Tea Break	Tea Break
12:00 - 01:30 PM	Robotics: Introduction & DOF	Robotics 2 Rural - Innovative Teaching and Research Approaches	Modular Robotics: Importance and connect to Industry 4.0	Qualification for Industry 4.0	Bionic Manipulators
	Mr. Rajeevlochana G. Chittawadigi	Prof. S. K. Saha	Dr. Ekta Singla	Mr. Usman Ali	Prof. Pushparaj Mani Pathak
01:30-02:30 PM	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
2:30 - 4:00 PM	Homogeneous Transformation & DH Transformation	Exoskeletons: Customised Design and Applications	Robotics and Mechatronics in Medicine	Mindfulness in 2021	Smart Manufacturing and IIOT
	Mr. Rajeevlochana G. Chittawadigi	Dr. Ekta Singla	Prof. Sunita Chauhan	Mr. Rahul Verma	Prof. R. S. Walia

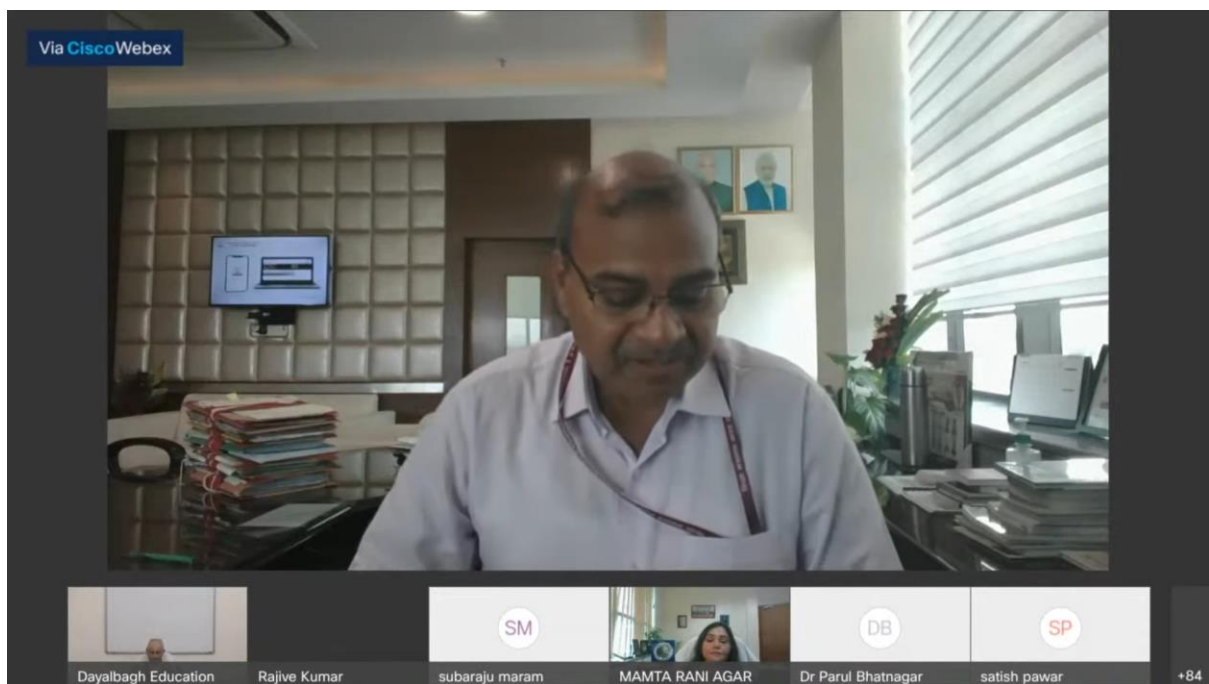
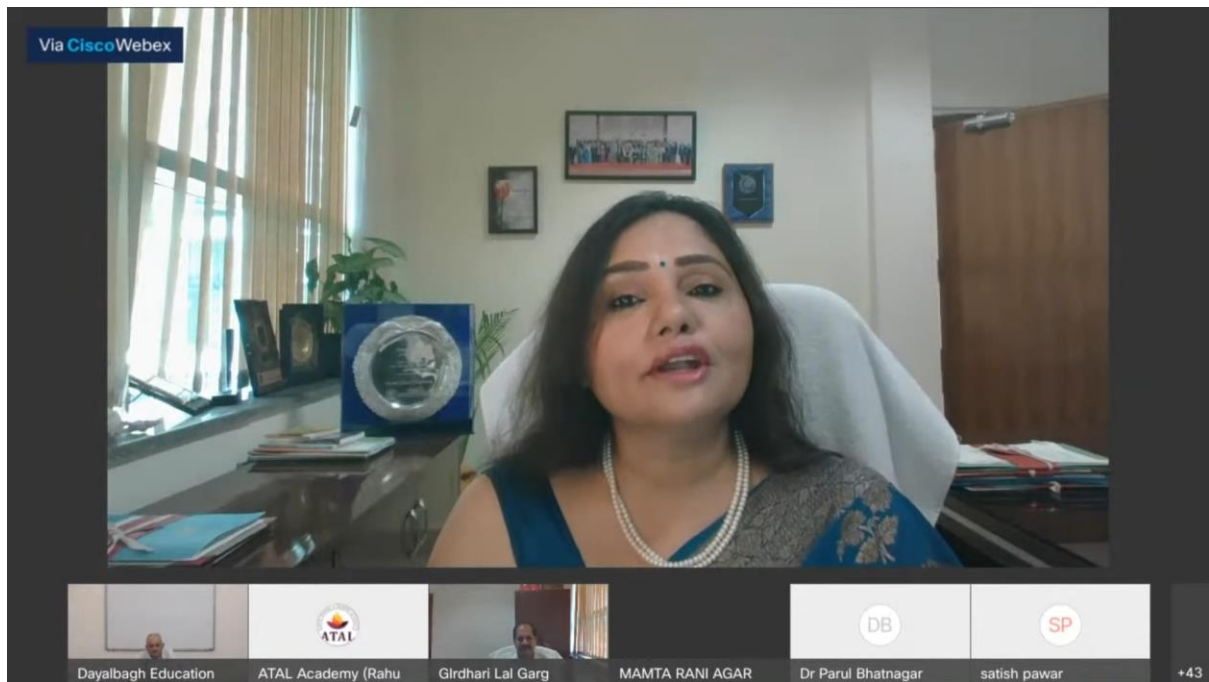
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The inauguration was held on 23rd August 2021 online at 11:00 am. Chief Guest of the program was Prof. Prem Kumar Kalra, (Director, Dayalbagh Education institute) Guest of Honour of the function were Prof. Rajive Kumar (Member Secretary, AICTE) and Dr. Mamta Rani Agarwal (Adviser-I, ATAL Academy), Dr. Amit Dutta (Deputy Director, ATAL AICTE) and Coordinator chaired the function. Also, Directors of different academies, and AICTE official were also present with the participants.

Adviser-I, ATAL Academy, Dr. Mamta Rani Agarwal addressed the participants about online FDP and various initiatives by ATAL Academy. Dr. Amit Dutta, Deputy Director, ATAL AICTE, proposed the Vote of Thanks.

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Some screenshots of the inaugural function are as below:



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The list of participants was:

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The screenshots of the participants taken on the closing are:



The screenshot displays a Zoom meeting interface. On the left, a presentation slide is visible with the following content:

- MAHARAJA AGRASEN INSTITUTE OF TECHNOLOGY, DELHI**
- MAIT** (Maharaja Agrasen Institute of Technology logo)
- NBA ACCREDITED B.TECH. PROGRAM(S)**
- CSE, ECE & MAE**
- ATAL** (AICTE Training & Learning Academy logo)
- THANKS for Attending !**
- ATAL workshop on Robotics: Advances and Applications**
- Department of Mechanical and Automation Engineering (MAE)
- PSP Area, Plot No. 1, Sector-22, Rohini, Delhi-110086 INDIA.

On the right side of the Zoom window, a vertical column of participant video thumbnails is shown. Below the presentation slide, a larger grid of participants is visible, showing several individuals in various settings, some with their video off (represented by grey icons).

It was a great Initiative by ATAL Academy. I am thankful to AICTE for giving me this opportunity to conduct online FDP for faculty members of technical institute of India free of cost. I got huge response for registration as well as lots of compliment of arranging the online workshop, content and hands on.