



## Workshop Document: Humanoid Robot Building Workshop – Day 2

### Event Context – Humanoid Robot Building Workshop

- **Date:** 28th March 2026
- **Venue:** IIT Hyderabad

### Event Detail:

Time Slot	Session Title	Topics to Cover
11:00 AM – 11:30 AM	<b>Introduction to Humanoid Robotics</b>	<ul style="list-style-type: none"> <li>• Welcome and session overview</li> <li>• Introduction to humanoid robots</li> <li>• Applications of humanoid robots in education, service robotics and automation</li> <li>• Overview of humanoid robot components such as Arduino, servo motors, sensors and power supply</li> <li>• Explanation of robot movements like head rotation and hand movement</li> </ul>
11:30 AM – 12:30 PM	<b>Hardware Distribution &amp; Setup</b>	<ul style="list-style-type: none"> <li>• Distribution of humanoid robot kits</li> <li>• Explanation of components (Arduino board, servo motors, jumper wires, robot frame)</li> <li>• Safety precautions</li> <li>• Overview of wiring and connections</li> </ul>
12:30 PM – 1:30 PM	<b>Kit Building &amp; Arduino Coding</b>	<ul style="list-style-type: none"> <li>• Step-by-step humanoid robot assembly</li> <li>• Connecting servo motors to Arduino</li> <li>• Assembling robot hands and head mechanisms</li> <li>• Introduction to Arduino IDE</li> <li>• Writing and uploading basic servo motor control code</li> <li>• Controlling head and hand movements</li> </ul>



# FORGE

Alumnus Services Pvt. Ltd.



Level II, Prestige Trade Towers, 46  
Palace Road,  
Bangalore-560001

<b>1:30 PM – 1:45 PM</b>	<b>Testing &amp; Debugging</b>	<ul style="list-style-type: none"><li>• Testing servo motor operations</li><li>• Verifying hardware connections</li><li>• Debugging Arduino code</li><li>• Ensuring head rotation and hand movements work properly</li></ul>
<b>1:45 PM – 2:00 PM</b>	<b>Task Assignment</b>	<ul style="list-style-type: none"><li>• Participants implement assigned tasks such as programming multiple servo movements</li><li>• Creating movement sequences</li><li>• Adjusting angles and improving robot motion</li></ul>
<b>11:00 AM – 11:30 AM</b>	<b>Evaluation &amp; Demonstration</b>	<ul style="list-style-type: none"><li>• Participants demonstrate their humanoid robot functions</li><li>• Mentors check code and hardware connections</li><li>• Feedback and improvements</li><li>• Session wrap-up</li></ul>