Department of Mechanical Engineering

Event Report

SDP (Internship) on Modelling Robot Kinematics using Python Programming

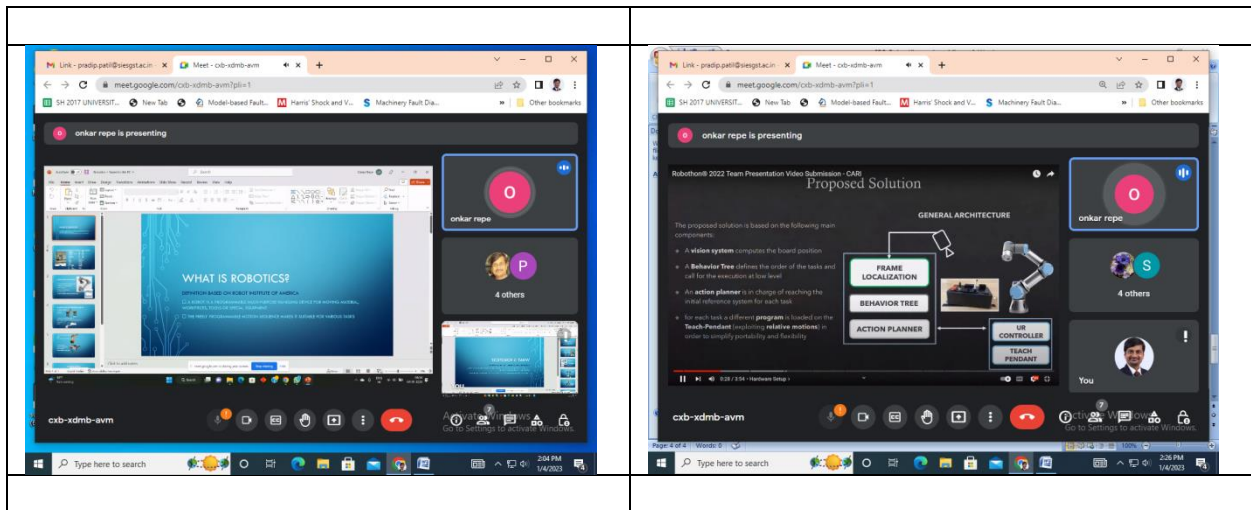| Event Information |
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| **Event Type: Workshop** |
| **Event Title:Modelling Robot Kinematics using Python Programming** |
| **Resource Person:Dr. Pradip P. Patil and Prof. Chandan D. Chaudhari** |
| **Event Date: 02-01-2023** |
| **Organized for: Students** |
| **Organized by: Department of Mechanical Engineering** |
| **Target Audience (Branch & Nos.): Undergraduate Students** |
| **Attachments: 1. Photographs (JPEG/PNG)** |

Event Description

SDP and Internship program for students was organized during the winter vacation for students of all branches. The program was interdisciplinary and required no prerequisite knowledge to students. The SDP was arranged with the following objectives:
1. To gain knowledge of Python programming language
2. To perform programming of robot
3. To study the parameters of motion in kinematics robotics
4. To study various design principles of robotics through kinematic analysis, workspace analysis, and trajectory planning

The resource person or speaker for the program were Dr. Pradip P. Patil and Prof. Chandan D. Chaudhari. Total number of students who attended this SDP were 3.

Topic that were taught during the SDP are Use of print function, Library in Python, Lists and Array, Plots, operations on files and statistical operations in Python in the first week. While in second week are introduction to Robotics, use of software like Robo analyser, Robot kinematics etc.

1. Photographs (in JPEG/PNG):

2. Attendance report

Three students attended the course.

3. Feedback Report (Scanned copy)

3. Indicate the degree to which you agree or disagree with the following statements.

This experience has:	Strongly Agree	No Opinion	Disagree	Strongly Disagree
Given me the opportunity to explore a career field	✓			
Allowed me to apply classroom theory to practice	✓			
Helped me develop my decision-making and problem-solving skills		✓		

Expanded my knowledge about the work world prior to permanent employment.		✓		
Helped me develop my written and oral communication skills.		✓		
Provided a chance to use leadership skills (influence others, develop ideas with others, stimulate decision-making and action)		✓		
Expanded my sensitivity to the ethical implications of the work involved	✓			
Made it possible for me to be more confident in new situations		✓		
Helped me learn to handle responsibility and use my time wisely	✓			
Helped me discover new aspects of myself that I didn't know existed before	✓			
Helped me develop new interests and abilities	✓			
Helped me clarify my career goals.		✓		
Provided me with contacts which may lead to future employment			✓	
Allowed me to acquire information and/ or use equipment not available at my institute	✓			

4. Impact Analysis:

Total Participation: 3

Total Assignments: 6

No. of Students solved All the Assignments: 3

Level of Assignments asked in Sessions: Advanced