

Anekant Education Society's

**Tuljaram Chaturchand College of Arts, Science and Commerce Baramati  
(Autonomous)**

**Department Of Computer Science**

**Seminar Report on "Fundamentals of Robotics"**

**Date** : Tuesday, October 22nd 2019  
**Time** : 2.00 pm to 5 pm  
**Venue** : Seminar Hall, Computer Science Department  
**Attendees** : M.Sc. (Computer Science) II students  
**Organizers** : Computer Science Department  
**Resource Person** : Mr. Akshay Bhapkar.  
Mr. Vishal Bhagwat.

**About Resource Person:**

- Mr. Akshay Bhapkar sir is Assistant Professor at Mechanical department of Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology, Baramati. He has done his M.E. In Design and Mechanical. He has 6 years of teaching experience. Along with this he has 2 years of industrial experience. He is expert in CAD and CAE.
- Mr. Vishal Bhagwat sir is Assistant Professor at Mechanical department of Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology, Baramati. He has done his M.Tech. In manufacturing from National Institute of Technology, Calicut, Kerala. He has 8 years of teaching experience. He is expert in the field of manufacturing, material science, robotics and automation.

**Brief Report of the Seminar:**

This Seminar was organized by Computer Science Department of Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati (autonomous). The Seminar started with the welcome address and felicitation of guests. Ms. Kalyani Londhe welcome and introduced the Guests. Mr. Upendra Choudhari Sir HOD, Computer Science Department, has felicitated Mr. Vishal Bhagwat Sir with the Book. He also felicitated Mr. Akshay Bhapkar Sir with the Book.

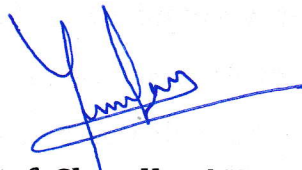
Received  
& dated  
TQB

Mr. Akshay Bhapkar Sir started the seminar with introduction of robotics. He told that robotics is multidisciplinary field with the domains mechanical, electrical and computer science. He thoroughly explained the basic three laws of robotics. After that he told various types of robots like manual robot, variable sequence robot, numeric robot, playback robot, Intelligent Robot, mobile robots, educational robots, domestic robots etc. He explained in detail the basic components of robot. He explained robotic components with the help of human body. He told our students that for robotics DARL, VAL II, RAIL, AML, KAREL, Robpac/C programming languages are currently used in the industry. He said Nowadays most of the applications are built upon the robotics. He explained various applications like spray painting, welding, laboratory applications, aerospace, medical applications, material handling automotive industry etc. He also explained various advantages and disadvantages of robots.

After that students from mechanical department of Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology, Baramati explained their project of "Analysis and Modeling of Robotic Arm". The student's team showed live demo of robotic arm.

Mr. Vishal Bhagwat Sir explained in detail all the mathematical calculations used for that project. He explained the various concepts like Matrices, rotations, transformations, gripping tools, D-H parameters, roll, pitch and yaw angles, trajectory planning etc.

Total 36 students from M.Sc. computer science II benefited from this Seminar. Mrs. Attar N.S., Mrs. Gavimath P.M and Mr. Kapase D.M. maintained discipline and collected feedback forms from the students. The session ended with the vote of thanks from Ms. Kalyani Londhe. This report is submitted for your kind information.



**Prof. Choudhari U.D.**

**Head**

**Department of Computer Science**

Department of Computer Science

Dt. 17.10.2019

To,  
The Principal,  
Tuljaram Chaturchand College of Arts, Science & Commerce,  
Baramati

**Subject :** About organizing a skill based seminar on Robotics.

R/Sir,

Department of Computer Science willing to organize a one day Seminar on Fundamental of Robotics and embedded Programming for M.Sc.(Computer Science)-II Year Students purpose under the skill development course. The seminar contains two sessions, on 22<sup>nd</sup> October 2019. Seminar is delivered by Mr. Akshay Bhapkar, Dept. of Mech. Eng., V.P. Engineering College, Baramati. So kindly allow to organize such seminar, their Remuneration of Rs.1200/- for the same and their local hospitality.

Thanking you

Allowed  
17/10.

Yours faithfully



Mr. U.D. Choudhari

Head

Dept. of Computer Science

Anekant Education Society's  
**Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati**  
(Autonomous)  
Department of Computer Science


**NOTICE**

Date: 19/10/2019

All Students of M.Sc. (Computer Science) II are hereby informed that Computer Science department is organizing seminar on "**Fundamentals of Robotics**" for skill development on **Tuesday 22/10/2019** delivered by Mr. Akshay Bhapkar and Mr. Vishal Bhagwat from Mechanical department of Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering and Technology, Baramati.

**Venue:** Seminar Hall (Computer Science Department)

**Time:** 2.00 pm to 5.00 pm



**Prof. Choudhari U.D.**

**Head**

**Department of Computer Science**

# Attendance sheet of Seminar On " Fundamental of Robotics "

22/10/2019

Msc (computer science) II<sup>nd</sup> year

Roll no	Stud Name	Sign
14061	MANDAVKAR MAYURI BALASO	<u>Mayuri</u>
14062	KHANDALE VIDYA RAGHUNATH	<u>V.Khandale</u>
14063	JADHAV PRAJAKTA MADHUKAR	<u>P2</u>
14064	DESHMANE ARATI ANKUSH	<u>Deshmane</u>
14065	POTNIS SNEHAL CHANDRASHEKHAR	<u>Potnis</u>
14066	PETKAR RENUKA MANGESH	<u>Petkar</u>
14067	GOSAVI SOURABH VILAS	<u>Sourabh</u>
14068	SHINDE VICKY SURESH	<u>Shinde</u>
14069	SHINDE MAYUR BALBHIM	<u>Shinde</u>
14070	BHOSALE GAUTAMI NARENDRA	<u>Gautami</u>
14071	KHARAT KOMAL MANOJ	<u>Mkharat</u>
14072	GHORPADE NAMRATA UDAYSINH	<u>Ghorpade</u>
14073	LONDHE PUNAM AJINATH	<u>Punam</u>
14074	GUND PANKAJ PANDURANG	<u>Gund</u>
14075	CHODHARI PRAGATI BHANUDAS	<u>Pragati</u>
14076	SAPKAL ARCHANA LALASO	<u>Sapkhal</u>
14077	BHOSALE SAYALI RAMDAS	<u>Sayali</u>
14078	SHINDE MONIKA VIJAYKUMAR	<u>Shinde</u>
14079	MOHARE DATTATRAYA ARJUN	<u>Mohare</u>
14080	GAIKWAD SAGAR RAJENDRA	<u>Gaikwad</u>
14081	GAIKWAD SHWETA UMESH	<u>Shweta</u>
14082	BAGAL PUSHPALATA SAMBHUDEO	<u>Bagal</u>
14083	NANAWARE TUSHAR PARMESHWAR	<u>Nanaware</u>
14084	BARAVKAR RANJEET SHIVAJI	<u>Baravkar</u>
14085	SHAIKH RAFIYA IRFAN	<u>Rafiya</u>
14086	RAWAT DURGAKUMARI GHANSHYAMKUMAR	<u>Rawat</u>
14087	DESHPANDE ABHISHEK VAMAN	<u>Deshpande</u>
14088	JADHAV VRUSHALI RAMCHANDRA	<u>Jadhav</u>
14089	BADAM MADHAVI ANJANEYULU	<u>Badam</u>
14090	MANCHIRAJU HYMAVATHI SURYANARAYANA	<u>M. Hymavathi</u>
14091	SONAWANE SOMANATH NAVANATH	<u>Sonawane</u>
14092	GHONGADE PRATIK BALASAHEB	<u>Ghonge</u>
14093	SHINDE NAMRATA BAPURAO	<u>Shinde N.B</u>
14094	SHENDE DIPTI JAGDISH	<u>Shende</u>
14095	CHANDGUDE NILESH RAMCHANDRA	<u>Chandgude</u>

14096 RASANE SHIVANI ASHOK

Total student : - (36)

Head  
Department of Computer Science  
Department of Computer Science

**Anekant Education Society's**  
**Tuljaram Chaturchand Arts, Science and Commerce College, Baramati**  
**Entrepreneurship Development Cell**  
**Seminar on Fundamental of Robotics**

**Feedback sheet**

**Date:-22/10/2019**

1. Knowledge and information gain from participants at this event is useful.  
 Yes  No
2. Today's seminar activity conducted by our department is very thankful and knowledgeable.  
 Yes  No
3. Today's speaker is share much more knowledge or information for about basics of robotics.  
 Yes  No
4. Can you agree with this seminar content and can you understand overall flow of seminar.  
 Yes  No
5. Today's seminar topic is motivated you and give new ideas of fundamental robotics.  
 Yes  No
6. Are you interested make carrier in Robotics.  
 Yes  No
7. Robot is harmful or useful.  
 Harmful  Useful  Can't say
8. Did you like to learn about subject Robot.  
 Yes  No

Any Remark / Suggestion:

*excellent*

**Anekant Education Society's**  
**Tuljaram Chaturchand Arts, Science and Commerce College, Baramati**  
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Can't say

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Yes

No

Any Remark / Suggestion:

good presentation

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Any Remark / Suggestion:

*good presentation*



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Any Remark / Suggestion:

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Any Remark / Suggestion:

*good. - !!!*

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Any Remark / Suggestion:

*Nice Representation.*

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Any Remark / Suggestion:                      NO

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Any Remark / Suggestion:

Anekant Education Society's  
**Tuljaram Chaturchand College, Baramati**  
**Senior College**  
**Payment Voucher**

Paid to

Name :-

Mr. Akshay Bhapkar

Date:- 22/10/2019

Address:-

Dept. of Mech Engg. V.P. Engineering College, Baramati

Head of Exps on account of:-

Sr. No.	Particulars of Payment	Honorarium	Other	Total
	Remuneration of Seminar	1200/-	-	1200/-
	Fundamental of Robotics			
	and the under the Skill			
	Development			
	Three hours and Local			
	Convenience			
	Total Rs.	1200/-		1200/-

Rupees in Words:-

one thousand two hundred only

Name of Payee:-

Mr. Akshay A. Bhapkar

Address:-

Flat no-5 Nandazaj Appl. Indupur Road, Baramati

Name of Bank

Bank of Maharashtra

Account No.

68018918618

Branch Name

Baramati

IFSC Code

MAHB0000073

For Account Use Only

Checked & Found Correct recommended for Payment

Account Clerk

Office Superitendant

Registrar

Allowed & Pay/ Not Pay

Principal

Received with thanks from The Principal. Tuljaram Chaturchand College, Baramati

Signature

ABhapkar

22/10/2019





**Interaction with students**



**Interaction with students**