



BHARTIA VIDYA BHAVAN'S
SARDAR PATEL COLLEGE OF ENGINEERING

(An autonomous institution affiliated to University of Mumbai)

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SARDAR PATEL
AUTOMATION
AND ROBOTICS
KLUB

NEWSLETTER
2012-13

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SPARK

About SPCE

Sardar Patel College of Engineering (SPCE) under the management of the Bhartiya Vidya Bhavan, was founded by

fence Minister of India. The college was inaugurated by the first Prime Minister of Independent India, Pandit Jawaharlal Nehru in 1962. The college is dedicated to Sardar Vallabhbhai Patel, an eminent nation

also meets the need of quality education in the challenging world of business. Over the last 50 years the college has gained an excellent reputation in the field of Technical Education.



Kulapati Dr.K.M.Munshi. It was established to meet the growing demand for engineering talent.

The foundation stone of the college was laid on 17th September 1961 by Shri.Y.B.Chavan (the then Chief Minister of Maharashtra who later became the De-

builder of independent India.

The college is autonomous and affiliated to the University of Mumbai for the full-time degree and post graduate degree courses. The institute has set high standards for aspiring engineering students and

SPCE is one of the few colleges that have received Grade 'A+' rating for its aided courses from the Govt. of Maharashtra which certifies the spirit of excellence that the institute has symbolized and always practiced.

VISION

“TO BUILD A RENOWNED INSTITUTION WHICH WILL PRODUCE SKILLED GRADUATE ENGINEERS WITH GOODWILL FOR HUMANITY”

MISSION

To impart quality education through need based curriculum in academic programmes.

To enhance career opportunities for students through industry institute interaction & value added courses.

To promote excellence by encouraging a wide range of views, lateral thinking & a sense of discipline.

To inculcate responsibility towards society.

OBJECTIVES

To achieve & maintain excellence in education & research.

To develop & enhance industry institute interaction both at student & faculty level.

To modernize laboratories to keep abreast with the needs of the changing curriculum & research activities.

To build up the institution through interaction with alumni & interdepartmental activities.

Our Inspirations

Dr. P. H. Sawant

Professor & Principal - Sardar Patel College of Engineering

Area of Interest - Construction Management, Water resources for surveying.

"It gives me immense pleasure to announce that Department of Mechanical Engineering is conducting different workshops and industrial visits under SPARK. I congratulate the coordinator & Head MED for organizing this type of workshop which will enrich the knowledge of participants in the area of automation and robotics with the help of valuable practical knowledge from their seniors. This will empower the students of SPCE to conduct more such activities".

Dr. M. M. Murudi

Professor & Vice-Principal - Sardar Patel College of Engineering | TEQIP

Coordinator

Area of Interest- Earthquake Engineering.

"As a Vice-principal and TEQIP coordinator I am very happy that Mechanical Engineering Department is taking a leading role by arranging this type of workshop which boosts industry-academia interaction. I congratulate head MED and his team for conducting such important and practical oriented workshop for the benefit of academic fraternity. "



OUR INSPIRATION

Dr. R. B. Buktar

Associate Professor & Head of Department (Mechanical Engineering)- Sardar Patel college of Engineering

“As the Head of Mechanical Engineering Department I am very proud of the students of SPARK that they are conducting various workshops and industrial visits in the field of automation and robotics. I congratulate SPARK committee for imparting practical knowledge to the students through workshops.”



MESSAGE FROM COORDINATOR

Prof. D. N. Jadhav

Associate Professor Mechanical Engineering Department– Sardar Patel College of Engineering

“In today's world practical knowledge and management skills are of paramount importance. The SPARK committee is formed with the goal to empower students to use their management skills and improve their practical knowledge. This club will also act as a platform to discuss the advancement in the field of automation and robotics.”



LINE FOLLOWER WORKSHOP

The workshop started with a presentation on the current and upcoming events of the Club. We (the club committee and organizers) observed that the students already knew all about it which in turn made us realize actually how much popular the club has become and that how much people are talking about it. Also students were informed about the yearly IV and that they could start sending in relevant places now.

Then we Distributed the material required for the LINE FOLLOWER BOT, further we proceed for the programming. After programming of bots we moved to testing arena which is made for the Line Following bot.

Doing all these tasks all the students enjoyed a lot as well as they gave some suggestions for the next workshop to be taken.



MR. VIPUL SAWANT EXPLAINING BASICS OF LINE FOLLOWER

AQUABOT AND HYDRAULICS WORKSHOP

After the overwhelming response towards the 1st workshop conducted by SPARK and the students' enthusiasm towards the club, the 2nd workshop on making an AquaBOT and Hydraulics Arm was conducted on 13-14th of October. The workshop was attended by a total of 82 students.

The workshop started with a presentation on the current and upcoming events of the Club. We (the club committee and organizers) observed that the students already knew all about it which in turn made us realize actually how much popular the club has become and that how much people are talking about it. Also students were informed about the yearly IV and that they could start sending in relevant places now.

This was soon followed by a very engaging lecture on AquaBOT, their designing aspects and the knowledge of constraints that govern them and various mechanisms used, was imparted to the students. The day's prototype clamp design was made using CATIA V5R19 and the students were led to the ground floor workshop to start making the clamp, that was just designed, from scratch.

With the required materials distributed and the students geared up with tools, the making of the clamp started. Four hours later students were seen grabbing stuff around with their newly made clamps, before which they learned how to cut, file, and drill including other various production techniques. The workshop concluded again with the same if not better response from the students while they appreciated how much fun they had with the production and the me-



SAGAR JOSHI EXPLAINING CONCEPTS OF HYDRAULICS


PCB Workshop [SUCCESSFUL]

With the members pouring in, the date for the first workshop, PCB Designing Workshop, to be conducted by SPARC soon approached. It was held on 1st of September 2012 and was attended by a total of 75 students from various branches and colleges.

The workshop commenced with a presentation on the Club and its future plans and about the Robocon competition. After which the attendees were taught the basics of Robotics followed by theory on circuits and other things related to PCB Workshop. After this session students got hands on experience of designing PCB on PC using software and soldering the connections during which each group of students were assisted by few organizers. After the completion of the Designing part, the circuits were tested and the eight hours session concluded.

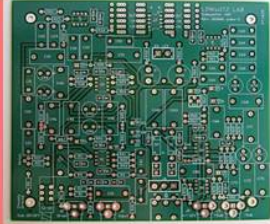


TESTING OF PCBs



Sardar Patel Automation and Robotics Klub
presents

PCB designing with Musical IC Workshop

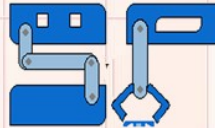


SPARK gives you the opportunity to learn how to design printed circuit boards using the software, with our own team of ROBOCON.

Date : 1st September 2012, Saturday.

Time: 10AM

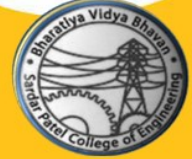
See you guys and yes all are welcome!



ROBOTICS
AND AUTOMATION
KLUB

Vipul: +91-9821942442
Tanvy: +91-9920546375

Fees:
Rs. 225 for Members
Rs. 300 for Non-Members

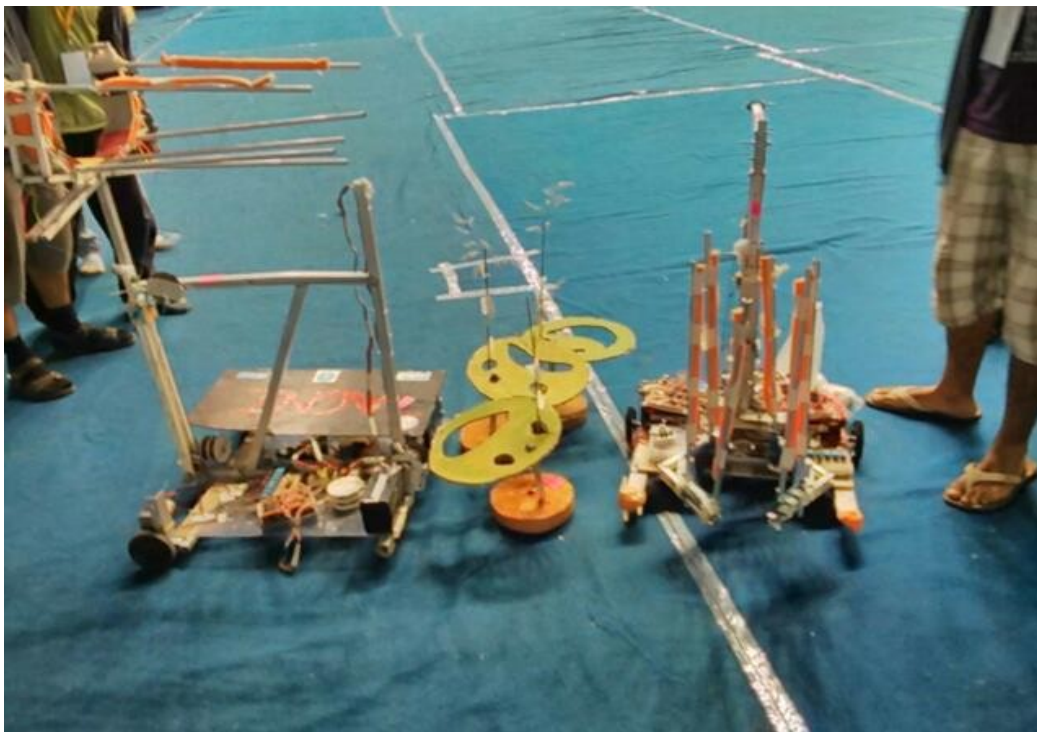


POSTER OF PCB WORKSHOP

PARTICIPATION IN ROBOCON 2013

ROBOCON is a national and international level competition. It encourages the students to develop something in field of automation and robotics. Members of SPARK committee represent SPCE in this competition every year. In 2013 SPCE ROBOCON TEAM participated and stood 13th all over India.

In 2013 the theme was THE GREEN PLANET.



MANNUAL AND AUTO BOTS



STUDENTS ASSEMBLED FOR THE MATCH ON ARENA

FEW MOMENTS



PPT PRESENTATION ON AQUABOT



PARTICIPANTS LEARNING HOW TO USE SOLDERING GUN



HYDRAULIC WORKSHOP A SUCCESS



LEARNING PROGRAMING LOGIC



TEAM LEADER TANVY GUIDING THE OPERATORS ON FIELD



"THE IV"



LIMITED REGISTRATIONS !!!!

ADMITTANCE ON FIRST COME FIRST SERVE BASIS
SO SIGN UP SOON !!!!!

COST : Members ₹ 500
Non-Members ₹ 650

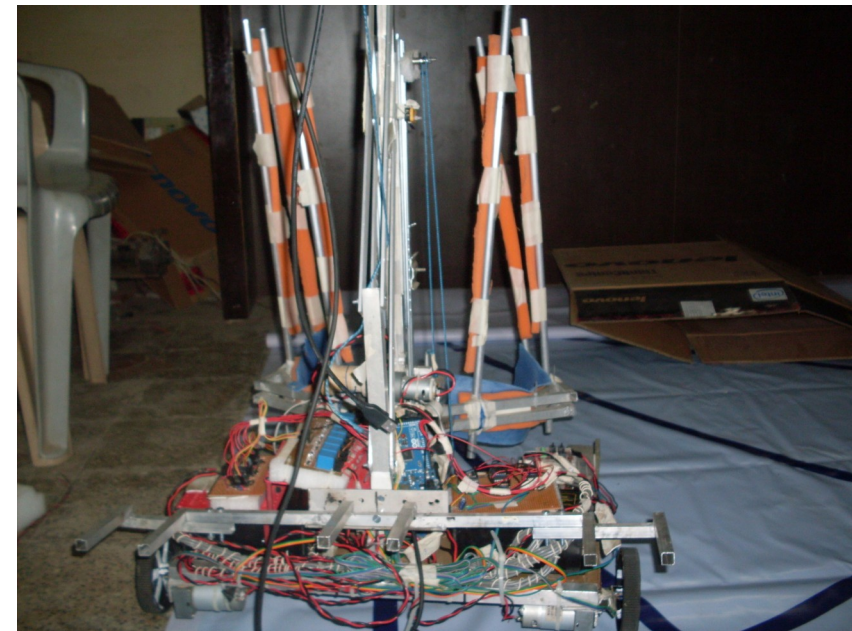
Date : 21st Jan, 2012
Venue: TATA Motors, Pune



Contact

Dhiraj TE Mech :9867062117
Vipul TE Elect :9821942442

POSTER OF IV TO TATA MOTORS



MANNUAL BOT 2013

SR.NO.	NAME	DESIGNATION	BRANCH
1	TANVY LIMAYE	TEAM LEADER	MECHANICAL
2	SAGAR JOSHI	MANUAL OPERATOR	MECHANICAL
3	SWAPNIL PAWAR	AUTOMATIC OPERATOR	ELECTRICAL
4	VIPUL SAWANT	PIT CREW	ELECTRICAL
5	DARSHAN FOFADIYA	PIT CREW	ELECTRICAL
6	SHISHIR SHAH	PIT CREW	MECHANICAL
7	DIVYA SHAH	MEMBER	MECHANICAL
8	HARSH MEHTA	MEMBER	MECHANICAL
9	MIRAL PARIKH	MEMBER	MECHANICAL
10	NEELAY SHAH	MEMBER	MECHANICAL
11	PARTH PALLAN	MEMBER	MECHANICAL
12	ADVAIT BHOGTE	MEMBER	MECHANICAL
13	TANMAY PADHYE	MEMBER	MECHANICAL
14	PINANK NAGDA	MEMBER	ELECTRICAL
15	SOURABH SHAH	MEMBER	ELECTRICAL
16	PRASHANT VADNERE	MEMBER	ELECTRICAL
17	DHRUVIN GOSAR	MEMBER	ELECTRICAL
18	MAYANK JAGGI	MEMBER	ELECTRICAL
19	DEVANSH GORADIA	MEMBER	ELECTRICAL
20	ROHIT DUKHANDE	MEMBER	ELECTRICAL
21	BHAUMIK SHAH	MEMBER	ELECTRICAL
22	KUNAL AMARE	VOLUNTEER	ELECTRICAL
23	RISHABH KAMAT	VOLUNTEER	MECHANICAL

SPCE ROBOCON TEAM 2013

SPCE ROBOCON TEAM 2013



SPCE ROBOCON TEAM WITH HOD AND COORDINATOR



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