



PANIMALAR ENGINEERING COLLEGE

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All Eligible UG Programs are Accredited by NBA

Bangalore Trunk Road, Varadharajapuram, Poonamallee, Chennai - 600 123

COLLOBORATIVE LEARNING PLATFORM - REPORT

Name of Collaborative Learning Platform : e-Yantra – IIT-Bombay

Period : Aug 2020 – Till Date

Faculty Incharge Details

Name : THYAGARAJAN C, MAHENDRAN M, KARTHIKEYAN A

Objective : The objective is to create the next generation of embedded systems engineers with a practical outlook to help provide practical solutions to some of the real world problems.

No. of Students benefited : 23 teams

Outcomes : The Outcome is achievement of students in learning the aspects of embedded systems and build more IoT projects with Arduino module and Rasberry Pi module.

Faculty Incharge
(with Signature)

Dr. L.JABASHEELA
Professor & Head
Department of Computer Science and Engineering
Panimalar Engineering College
Chennai - 600123

HOD
(with Signature)



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LIST OF FACULTY MEMBERS INVOLVED IN E YANTRA ROBOTICS LAB



Dr. K. Mani, M.E. Ph.D.

Principal, Panimalar Engineering College.



Mr. C. Thyagarajan, M.E. (Ph.D.)

e-Yantra Co-ordinator,

CSE, Panimalar Engineering College.



Mr. M. Mahendran, M.E. (Ph.D.)

e-Yantra Co-ordinator,

CSE, Panimalar Engineering College.



Mr. A. Karthikeyan, M.E. (Ph.D.)

e-Yantra Co-ordinator,

CSE, Panimalar Engineering College.



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Letter of Appreciation

To,
The Principal,
Panimalar Engineering College, Tamil Nadu

This letter expresses our sincere appreciation for the involvement of your college *Panimalar Engineering College, Tamil Nadu* in the e-Yantra Lab Setup Initiative. It has been a pleasure being associated with your college and seeing the impact this initiative has had on your college, teachers and students.

On behalf of e-Yantra, we would like to express our heartfelt appreciation to your institution for your outstanding participation in the e-Yantra Lab activities and submitting a Poster regarding the same for *e-Yantra Symposium 2023*. Your college's teachers as well as student's dedication and hard work have led to your selection as one of the *top 15 best presentations* of your college's e-Yantra Lab activities in *e-Yantra Symposium 2023*.

We believe that your institution's participation in the e-Yantra Lab activities will serve as a benchmark for other colleges and inspire them to participate in this nation building initiative. We hope that your college's teachers and students will continue to display the same level of dedication and passion in future.

Once again, congratulations on your remarkable achievement, and we look forward to continuing to work together to inspire and empower the next generation of innovators.

Kantarp.

Prof. Kavi Arya
Principal Investigator, e-Yantra
Professor
Department of Computer Science and Engineering
Indian Institute of Technology Bombay



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

e-Yantra is a project sponsored by MoE, Government of India, under the National Mission on Education through ICT (NMEICT).



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eYantra

Engineering a better tomorrow

ERTS Lab

Department of Computer Science and Engineering

Indian Institute of Technology Bombay,

Powai, Mumbai-400 076.



Certificate of Participation

This is to certify that **Samuel Varghese J**, a student of **Panimalar Engineering College, Tamil Nadu** has participated in the **e-Yantra Robotics Competition (eYRC 2023-24)**.

He/She is a member of the team having the following team members:

1. Samuel Varghese J
2. Sanjay R
3. Sharnal S
4. Trilokesh Rajasekaran S

This team has participated in **AstroTinker Bot** theme.

Prof. Kavi Arya

Principal Investigator, e-Yantra

Professor

Department of Computer Science and Engineering

Indian Institute of Technology Bombay



www.eyantra.org



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NEX Robotics Pvt. Ltd.

Unit No.13, Building no.2 (A3), sector 1,

Millennium Business Park, Mahape,

New Mumbai-400 710

MH, IND. +91 9004094490, +91-022-27782445

e-mail: info@nex-robotics.com

web: <http://www.nex-robotics.com>



To,
The Principal,
Department Of Computer Science And
Engineering,
Panimalar Engineering College,
Chennai-600123.
Kind Attn:- C.Thyagarajan, M.E.,
Assistant Professor

Ref : NRPL/122.001

Date : 10 October 2019

Quotation for E-Yantra Lab setup

Sr No.	Equipment	Quantity	Original Unit Price	Discounted Unit Price	Amount	Total Discount
1	FireBird V 2560	2	35000	21594	43188	26812
2	Zigbee Modules 100m range	1	1990	1534	1534	456
3	Zigbee Modules Adapter	1	2900	2124	2124	776
4	Metal-gear Servo Motors	1	1,500	1062	1062	438
5	Servo Motor Based Gripper kit for the Fire Bird V robot	1	4000	3422	3422	578
6	Sharp GP2Y0A21YK0F infrared range sensor (10cm to 80cm)	1	1700	767	767	933
7	Shipping charges (by Air)		3000	3000	3000	
	Grand Total				55097.00	29993

For NEX Robotics Pvt. Ltd.



Dr. Anant Malewar

Director, NEX Robotics Pvt. Ltd.

Email: anant@nex-robotics.com

Cell: 09004094490, 022-27782445



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PANIMALAR ENGINEERING COLLEGE - eLSI FAMILY

Intra College Robotics Competition - 2022(e-Yantra)

Organized By

Department of Computer Science and Engineering

Selected Robotics Projects For the Final Demo on 25.04.2022(Monday)

S.No.	Robot Domain Specific	Team Head	Dept.	Batch Code
1.	Water Monitoring Robot	Subalakshmi R	CSBS	22ROB01
2.	Self balancing 2 Wheel Robot	Dharani B	EEE	22ROB02
3.	Smart Cart Using RFID	Arivumozhi S G	ECE	22ROB03
4.	Radar Robot	Deepalakshmi M	ECE	22ROB04
5.	Agriculture Bot	Navin Durai S M	CSE	22ROB05
6.	Autonomous Self Driving Car	Jagadeeshan D	EEE	22ROB06
7.	Fully Automated Solar Grass Cutter	Mohanaprasath S	MECH	22ROB07
8.	Object Detection for Military	Aakash D	ECE	22ROB08
9.	Human Following Robot	Priyanka T	CSE	22ROB09
10.	Telemedicine Robot	Yashika S	EEE	22ROB10
11.	Ai soldier Robot	Prasanth B	EEE	22ROB11
12.	Arduino Talking Robot	Madhumitha G	ECE	22ROB12
13.	Human Detection and Woman Safety	Harish kumar	ECE	22ROB13
14.	Blaze Warrior	Afreen J	ECE	22ROB14
15.	Line Follower Robot	Janani K S	ECE	22ROB15
16.	Voice Controlled Robot	Nivvetan.P	ECE	22ROB16



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17.	Hand Motion Robot Car	Gokul R R	ECE	22ROB17
18.	RF Controlled Robot	Kumudhapriya T P	ECE	22ROB18
19.	Obstacle Avoidance Robot	Sushmitha H	ECE	22ROB19
20.	Automated Prosthetic Robot Hand (using hand gesture)	Sidhaarth P S	IT	22ROB20
21.	Hand Motion and Voice Control Page Changer	Shagar. S	MECH	22ROB21
22.	Land surveillance Robot with Object Detection for Military.	Papisetty Gnanasahkar	ECE	22ROB22
23.	Hand motion Controlled Robotic Arm	Vijay P	MECH	22ROB23



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(eLSI FAMILY)

Intra College Robotics Competition - 2022(e-Yantra)

Organized By

Department of Computer Science and Engineering

25.04.2022

Bulletin



*Winner - I Place
Smart Cart Using RFID*

I ST PLACE : SMART CARD USING RFID

This event was conducted by eLSI family at Intra college Competition -2022 (e-yantra) held on 25.04.2022. Among the 23 teams First place winner awarded to Arivumozhi belongs to ECE Department Batch code(22ROB 03) for the Title " **Smart Card using RFID**".



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*Winner - II Place
Agriculture Bot*

This event was conducted by eLSI family at Intra college Competition -2022 (e-yantra) held on 25.04.2022. Among the 23 teams Second place awarded to Navin Durai S M belongs to CSE Department Batch code(22ROB 05) for the Title " Agriculture Bot".



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*Winner - III Place
Blaze Warrior - Fire Fighting Robot*

This event was conducted by eLSI family at Intra college Competition -2022 (e-yantra) held on 25.04.2022. Among the 23 teams Third Place awarded to Afreen J belongs to ECE Department Batch code(22ROB 14) for the Title "Blaze Warrior-Fire Fighting Robot".