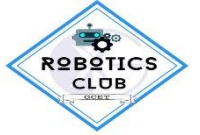# GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Department of CSE has established ROBOTIC LAB under MOU with SamrtBridge in the year 2019. As part of ROBOTICS LAB following Equipment, Workshops, projects, and events had organized according to Academic year-wise.

LIST of Components in Robotics Lab:-

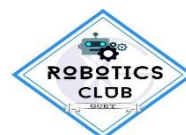| Sno	Name of the Component	Unit Price	Qty	Total
1	Turtlebot3 Burger	80000	2	1,60,00
2	Robotics MINI	78000	1	78,000
3	NVIDIA Jetson Nano Developer Kit	16500	6	99,000
4	Open CR 1.0	30000	1	30,000
5	LIDAR	28000	1	28,000
6	Intel® Real Sense™ Depth Camera D435	35000	1	35,000
7	3D-printer(garuda pixel pro)	120000	1	1,20,000
8	10.1 inch HDMI LCD touch screen Display	15000	1	15,000
9	USB 2.0 Wireless Wi-Fi 802.11N USB Adapter	450	6	2,700
11	USB 2.0 Mini Microphone	500	1	500
12	USB Speaker For Jetson Nano	2500	1	2500

PRINCIPAL
Geethanjali College of Engg. Tech.
Cheeryal (V), Keesara (M), R.R. Dist. (A.P.) - 501 301

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

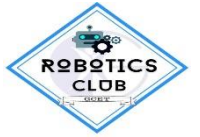**Summary of Event, workshop, and Project Details:-**

Sno	Academic Year	Name of the Project / Event	Date	Sanctioned Amount	Utilized Amount	Remarks
1		Build My Project - Humanoid Robo	04-12-2019	29044.08	29044.08	-
2	2019-2020	MOU with Smart Bridge Robotics Learning and Development center and Training with ROS software	02-12-2019	12,32,581	12,32,581	Training has been divided into 3-modules. It will be provided by Smart Bridge
3		Robotic Training Module-1	06-01-21to 23-01-21	-	-	As per MOU
4	2020-2021	Robotic Training Module-2	18-03-21 to15-04-21	-	-	As per MOU
5		IPAS Challenge	07-04-21	**54000**	5000	We are in 26th position over south Asian
7		MCME Competition (**Snake Robot**)	17-12-2021 to 18-12-2021	97,800	91,511	for this project Snake robot amount of 62,511, and the remaining used from IPAS balanced amount.
8		MCME Competition (**Medical Assistant Drown**)	17-12-2021 to 18-12-2021			
		Selecting the II-Year Students into ROBOTICS CLUB	08-03-2022			Total 30 II-Year students Were selected to the Robotics Club
9	2021-2022	Python Training to Second Year students.	17-03-22 to17-04-22	-	-	The training was given by Mr. Abhishek CSE - IV year Student (It is scheduled Thu, Fri and Saturday evenings from 7:00 P.M to 8:00 P.M
10		Navarith Pradarshan 2K22 – *innovation as an act to exhibit*	30-03-22	-	-	Around 300+ School Students and School Teachers have attended the program.

Robotics Lab Coordinator   **HoD-CSE**

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
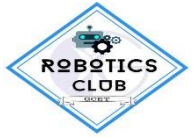## DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

2019 -2020

PRINCIPAL
Geethanjali College of Engg. Tecn.
Che ryal (V), Keesara (M), R.R. Dist. (A.P.) -501 301

To

The Principal,

Date: 21/9/2019

Geethanjali college of engineering and technology,

Cheeryal, Hyderabad

Sub: Request for starting Robotics Club at our college.

Respected Sir,

We the Department of CSE would like to request for a starting a robotics club at our college, as it is going to enhance the students capability to adapt Project based learning by doing projects on advanced technologies like Robotics, Artificial Intelligence, Machine Learning and also understand the intricacies involved in design and fabrication of the robots and also provide the platform to establish and showcase their developed bots.

We would like to request you to allow us to establish the club.

The following are the members of Coding club.

Faculty Members:

1. Mr. Y V N PhaniKishore -- Convener
3. Mr. A. Harekrishna Allu - Co-convener
4. Mr. J. Uma Mahesh – Member

Students Coordinators:

1. Denesh Narasimhan - Mech
2. G. Sai Siddharth Reddy- Mech
3. M. Gokul- CSE
4. B. Divya Sai Sathvik - ECE
5. Tejaswini- ECE

Thanking you

Yours Sincerely,

Y.V.N. Phani kishore

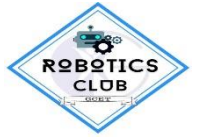Assistant Professor,

Department of CSE

please go ahead.

9 23/09

Requesting Letter to Principal sir starts Robotics Club in the College.

PRINCIPAL
Geethanjali College of Engg. Tecn.
Cheeryal (V), Keesara (M), R.R. Dist. (A.P.) - 501 301

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Quotation Details from SmartBridge

Fwd: Quotation for Robotics L&D center   Inbox ×

Yvn Phanikishore <yvnphanikishore@gmail.com>
to me

Dec 3, 2020, 11:11 AM

Best Regards
Phani Kishore Y.V.N
Asst.Professor,
Department of Computer Science and Engineering,
Geetanjali College of Engineering and Technology.

---------- Forwarded message ----------
From: **Yvn Phanikishore** <yvnphanikishore@gmail.com>
Date: Tue, Oct 20, 2020 at 1:43 PM
Subject: Fwd: Quotation for Robotics L&D center
To: <madhusudan.veldanda@gmail.com>

Best Regards
Phani Kishore Y.V.N
Asst.Professor,
Department of Computer Science and Engineering,
Geetanjali College of Engineering and Technology.

---------- Forwarded message ----------

---------- Forwarded message ----------
From: **Bethi Durga Prasad** <durgaprasad@thesmartbridge.com>
Date: Thu, Dec 5, 2019 at 3:00 PM
Subject: Quotation for Robotics L&D center
To: Yvn Phanikishore <yvnphanikishore@gmail.com>
Cc: Amarender Katkam <amar@thesmartbridge.com>, Narsimulu Marepalli <narsimulu@thesmartbridge.com>, Ramya Guntamukkala <ramya@thesmartbridge.com>

Dear sir,

Please find the attached Quotation for Intelligent Robotics Learning & Development Center

--
Thanks & Regards,

Bethi Durga Prasad
Robotics Engineer

SmartBridge Educational Services Pvt. Ltd.
Plot No 132, Bapuji Nagar, Habsiguda,Above DCB bank, 2nd floor,
Nacharam Main Road,Hyderabad, India – 500 076
Mobile: +919010688014 | Email: durgaprasad@thesmartbridge.com | www.thesmartbridge.com

[PDF] Quotation -Robotic...

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

SMARTBRIDGE
Let's Bridge the Gap
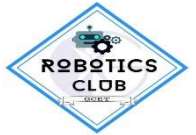
Ref.no: SB-RL-002
Date: 05 Dec 2019

To,
The Principle
Geethanjali College of Engineering & Technology
Cheeryala (V) Keesara (M), Rangareddy Dist.
Telangana, Hyderabad-501301.

Sub: - Quotation of Intelligent Robotics for Learning and Development Centre- reg.

Respected Sir,

With reference to the above subject, we thankfully acknowledge the receipt of your valuable enquiry; as per the discussion had with your good offices, we have prepared a list of items required for establishing L&D center.

With our experience we have recommended most of the suitable hardware & software platforms for Intelligent Robotics Learning and Development Centre.

Please find attached herewith the details of components in ANNEXURE-I. Detail technical Specifications in ANNEXURE-II.

S.No.	Description of Items	Qty, Nos.	Unit Price, Rs.
1.	Development Kits, Sensors, components for Emerging Technologies Lab	1	**Rs. 7,05,700**
2.	Robotics Softwares (Customized ROS, Gazebo, RviZ), Robotics Practice School Licenses, Training & Development Support.	1	**Rs.6,00,000**
	Cost of Robotics Lab (Before Tax), Rs.		13,05,700
	GST @ 18%, Rs.		2,35,026
	Total Cost of Robotics Lab, Rs.		15,40,726
	Max. Discount (20%)		3,08,145
	Grand total after Discount		12,32,581

Kindly review the proposal and provide your observations. We will be available at any time for your clarification.
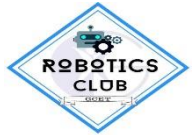
With Regards,

Amarender Katkam (signature)

Amarender Katkam
Founder & CEO
Mob: 9849334539

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

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Annexure-I

Sl. No	Description	Unit Price	Qty	Total
1	Turtlebot3 Burger	80000	2	1,60,000
2	Robotis MINI	78000	1	78,000
3	NVIDIA Jetson Nano Developer Kit	16500	6	99,000
4	Open CR 1.0	30000	1	30,000
5	LIDAR	28000	1	28,000
6	Intel® Real Sense™ Depth Camera D435	35000	1	35,000
7	3D Printer prusa i3 mk3	120000	1	1,20,000
8	10.1 inch HDMI LCDTouch screen Display	15000	1	15,000
9	USB 2.0 Wireless Wi-Fi 802.11N USB Adapter	450	6	2.700
10	Robotis Software License	20000	1	20,000
11	USB 2.0 Mini Microphone	500	1	500
12	USB Speaker For Jetson Nano	2500	1	2,500
13	Miscellaneous	15000	lot	15,000
14	The Construct E-Learning Courses Licenses	5000	20	1,00,000
15	Robotics Softwares (Customized ROS, Gazebo, RviZ), Robotics Practice School Licenses, Training & Development Support	12000	50	6,00,000
	Total Cost Excluding Taxes & Discount			**13,05,700**

Terms and Conditions:
- Components included are only for training purpose only.
- During Project Development of Robots if any mechanical components like Actuators, links, if any were not included, need to procure as Extra.
- TRANSPORT: Shipping Charges (Rs. 2000 / -) Extra.
- PAYMENT : 100% of total Hardware Cost (Item-1) and 30% of Software & Support Cost (Item-2) along with PO, Remaining 70% of (item-2) as per milestones.
- DELIVERY: Hardware within 4 weeks. Any delay from customs shall be considered as additional.
- WARRANTY: This offer covers manufacturer warranty if any. Technical support can be utilized over phone/ email on all working days for 6 Months.
- Quotation valid for 14 days , Stock items are subjected to prior sales, If stock lost new price & delivery will be applicable
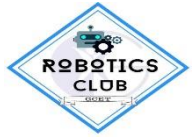
Our Bank Details-
- NAME: SmartBridge Educational Services Pvt Ltd
- BANK NAME: ICICI BANK LIMITED
- A/C.No.: 007605500462
- IFSC CODE: ICIC0000076
- GST : 36AAWCS3611C1ZC

ANNEXURE-II

Turtlebot3 Burger

With Turtlebot3 burger we will do some basic operations like Move using Interactive Marker on RViz, Move and Stop using LDS, Move to goal position and Move to custom routes with the help of ROS framework. Turtlebot3 burger for SLAM (Simultaneous Localization and Mapping)) and Navigation using Robot Operating System Framework. We can apply one of best Machine leaning algorithm DQL i.e. reinforcement learning with DQN (Deep Q-Learning). With the help of ROS framework we do our own projects on Turtlebot3 burger

Robotis MINI

ROBOTIS MINI is an adorable humanoid robot. We can program its motions with downloadable R+ Task and R+ Motion software. We can also control the robot via smart device by downloading the ROBOTIS MINI app. The Darwin-Mini app application (app) uses button, gesture, voice recognition and messenger to control or change movements. Darwin-Mini app to access the setting for server client motion sound and files
R+ Motion: Use RoboPlus motion to add or modify motions
R+ Task: Program your robot using RoboPlus

NVIDIA Jetson Nano Developer Kit:-

NVIDIA Jetson Nano Developer Kit is a small, powerful computer that lets you run multiple neural networks in parallel for applications like image classification, object detection, segmentation, and speech processing. All in an easy-to-use platform that runs in as little as 5 watts. It's simpler than ever to get started! Just insert a microSD card with the system image, boot the developer kit, and begin using the latest NVIDIA JetPack SDK. JetPack is compatible with NVIDIA's world-leading AI platform for training and deploying AI software.
We Install Robot Operating System on NVIDIA Jetson Nano.
We use NVIDIA Jetson Nano as main robot Computer.

Open CR 1.0

OpenCR1.0 (Open-source Control module for ROS) is an open source robot controller embedded with a powerful MCU from the ARM Cortex-M7 line-up. The hardware, software, schematics, PCB Gerber, BOM, and firmware source codes of the OpenCR1.0, the main controller used in the official ROS education platform TurtleBot3, are accessible and open to the public. Supports RS-485 and TTL to control the Dynamixels, and offers UART, CAN and a variety of other communication environment, development tools such as Arduino IDE are available as well. It has the advantage of being able to operate more powerfully when used with a host controller such as SBC (Single Board Computer).It provides various exclusive sources based on ROS, so that you can maximize the functions of OpenCR1.0 when using ROS

LIDAR

The LDS-01 is a 2D laser scanner capable of sensing 360 degrees that collects a set of data around the robot to use for SLAM (Simultaneous Localization and Mapping).It supports USB interface and is easy to install on a PC

Intel® RealSense™ Depth Camera D435

The Intel® RealSense™ Depth Camera D400 Series uses stereo vision to calculate depth. The D435 is a USB-powered depth camera and consists of a pair of depth sensors, RGB sensor, and infrared projector. It is ideal for makers and Developers to add depth perception capability to their prototype. Intel® RealSense™ Depth Camera D435 is designed to best fit your prototype. With the global image shutter and wide field of

SmartBridge Educational Services Pvt. Ltd.
Plot No .550/F, Road.No.92, Jubilee Hills, Hyderabad, Telangana – 500096
www.thesmartbridge.com, info@thesmartbridge.com

8

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view (85.2° x 58° x 94°), Intel® RealSense™ Depth Camera D435 offers accurate depth perception when object is moving or device is in motion, and it covers more area, minimizing "blind spots

3D Printer prusa i3 mk3
3D printing allows people to create new ideas/ products, construct low cost prototypes and find replacement parts at a low cost. Custom designs that can be 'one of a kind' and rather cheap construction of items makes 3D printing desirable. With the help of 3D printing we can print robot arms, and robot Body etc.

10.1 inch HDMI LCD Touch screen Display
To interact with the Robot we use some Display screen for Controlling and Data monitoring for the applications

USB 2.0 Wireless Wi-Fi 802.11N USB Adapter

Robotis Software License
The Robotis Software License is for people who have purchased Robotis Mini or Robotis Dream and wish to add to their functionality. It is the essential connection that makes your robot programmable in the language of your choice (Python)

USB 2.0 Mini Microphone
USB Microphone for PC or Mac for voice control robot operations. Driver-free, plug and play. Advanced digital USB provides superior clarity with the simplicity of a single USB plug-&-play connection. Noise-cancelling microphone filters out unwanted background noise. Power switch illuminates when microphone is active

USB Speaker for Jestson Nano
USB Speaker is used to listen the robot speech by applying AI algorithm

TheConstruct License
Become a ROS Developer Master ROS and learn the key skills to understand and create ROS projects. Get the best learning experience by programming simulated robots, working as a ROS developer from day one!

Robotics Softwares (Customized ROS, Gazebo, RviZ), Robotics Practice School Licenses, Training & Development Support

SamrtBridge – Robotics Club MOU Details:-

Organization Name	Title	Established Date
SmartBridge Educational Services Pvt. Ltd.	Robotics Learning and Development Centre	02-12-2019

MOU Extended COPY:-

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

SMARTBRIDGE

December 1, 2021

To,

The Principal,

Geethanjali College of Engineering and Technology,

Cheeryal Village, Keesara Mandal, Hyderabad,

Telangana – 501301

Sub: Amendment to MoU for Establishment of Center for Robotics Learning & Development

Ref: With reference to the attachment – MoU (Robotics L & D Center)

Dear Sir,

With reference to the Memorandum of Understanding (MoU) dated 2nd December 2019 - Due to covid pandemic outbreak, We were unable to execute the agreed scope of work in establishing Robotics Learning & Development Center. As agreed mutually by both the parties, the contract will be extended till 1st December 2022.

Please consider this letter as an official confirmation of the same and all pending activities will be executed as per the scope of work mentioned in (MoU)

Sincerely,

Amarender Katkam,

Founder & CEO,

SmartBridge Educational Services Pvt Ltd

PRINCIPAL
Geethanjali College of Engg. and Tech.
Cheeryal (V), Keesara (M), Medchal Dist.(T.S.)-501 301.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

1) Build My Project - Humanoid Robo:-
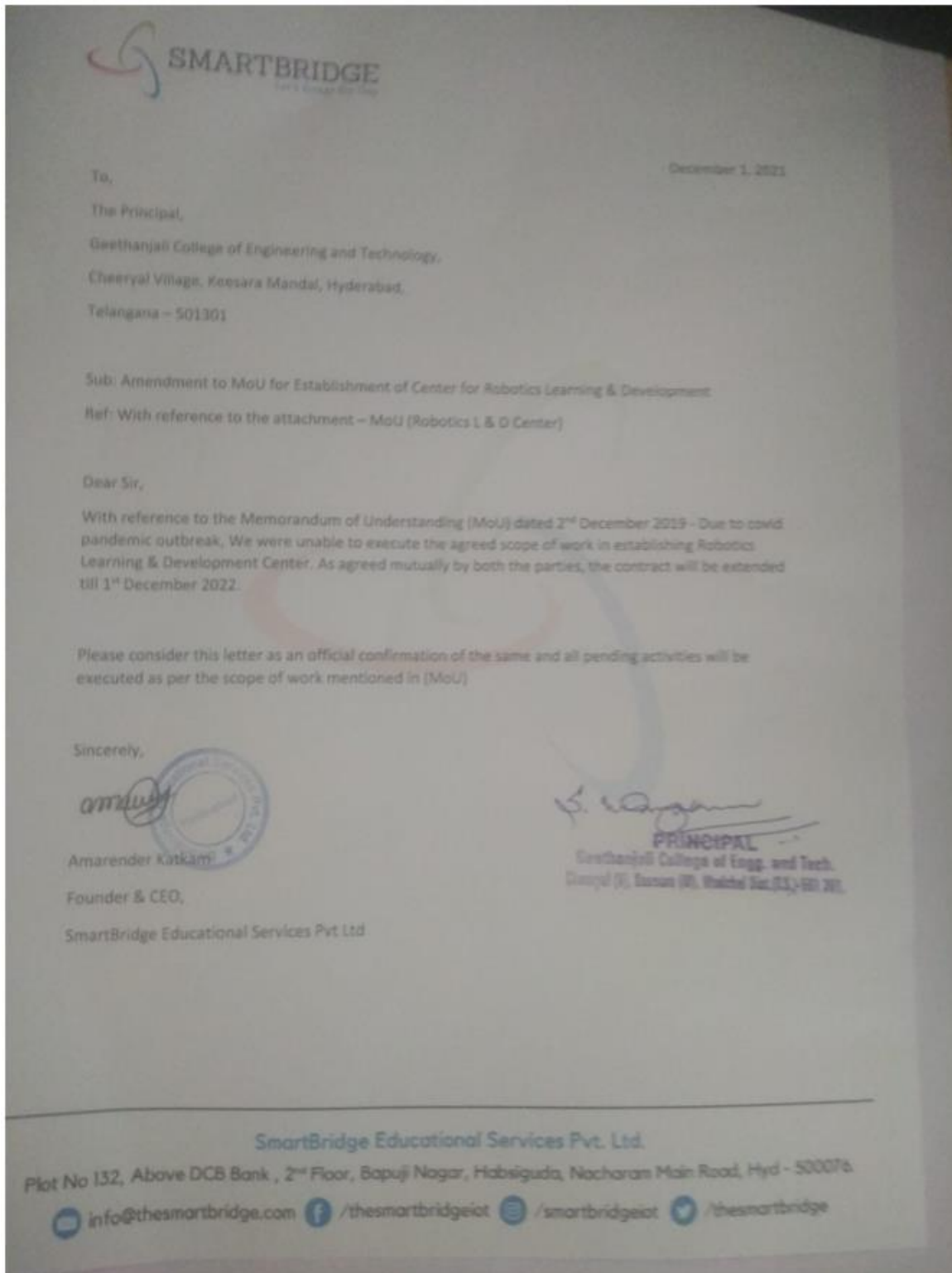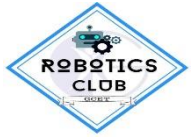
Date: 13/11/2019

To,

The Principal,

Geethanjali College of Engineering and Technology,

Cheeryal (V), Keesara (M).

Respected Sir,

Sub: Payment request for fabrication of Robot – Reg

I Y.V.N. Phani Kishore working as assistant professor in the department of CSE, would like to get to your notice that as part of robotics club of our college, we have been working on a robot (humanoid) which would be the anchor for the upcoming events in our college.

The software aspects of the robot are complete and would like to request you to permit us to go ahead in building the hardware required for the bot.

Approximate cost of procurement of the hardware and fabrication would be around 3,80,800 /-

Attached is the expenditure incurred in fabricating the robot.

I request you to kindly approve the same.

Thanking You,

Yours Sincerely,

Y.V.N. Phani Kishore

Assitant Professor & Robotics club incharge

Department of CSE,

Geethanjali College of Engineering and Technology

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Requesting letter to Principal Sir to build a Humanoid ROBO
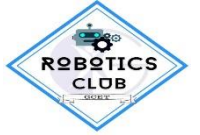
Phone . 9182058187
Website: www.geethanjaliinstitutions.com
info@gcet.edu.in

Geethanjali

Geethanjali College of Engineering and Technology

AUTONOMOUS

(Accredited by NAAC "A" Grade; ECE, CSE, EEE & ME, B.Tech Programs Accredited by NBA;
Approved by AICTE, New Delhi; Permanently Affiliated to JNTUH)
Sy. No. 33 & 34, Cheeryal (V), Keesara (M), Medchal District. - 501 301.

This is to whom to so ever it may concern

The college has agreed and sent a purchase order to M/S, build my project for construction and fabrication of humanoid robot.

this robot would be used for the purpose of educational awareness among the students of the college.

This robot will not be permitted to go out of the campus in any case and can solely be used for training and research activities in the campus only.

Regards,

Y.V.N. Phani Kishore

Incharge, Robotics Lab,

Geethanajli College of Engineering and Technology.

Ph: 9000208680

email: phanikishore.cse@gcet.edu.in

Scanned with CamScanner

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Requesting letter to Purchase Order.

TAX INVOICE

BUILD MY PROJECT

COMPANY NAME: Build My Project
ADDRESS: 103, Nehate Niwas, Dr. R. P
Road, Domb East-
STATE CODE: 421201
GSTIN 27BAKPT9317C1ZF
BANKING DETAILS
Name: Build My Project
Branch: Tilak Nagar, Dombivli
A/C No.: 60317074910
IFSC Code: MAHB0000635

CUSTOMER NAME: Geethanjali
College of Engineering, Hyderabad
ADRESS: heeryal Village, Keesara
Mandal, Hyderabad, Telangana 501301
STATE CODE: 501301

PROJECT/SERVICE: 5ft. 8AXIS HUMANOID ROBOT

INVOICE NO. BMP220901
INVOICE DATE: 22/09/2020

Sr. No.	Name of product & Description	Qty,	PRICE	AMOUNT INR
1.	5ft. 8 AXIS HUMANOID ROBOT	1	4,57,024/-	Rs.4,57024/-
TOTAL		-	4,57024/-	Rs.4,57024/-
DISCOUNTED AMOUNT		-	1,34,312/-	Rs.1,34,312/-
TOTAL PAYABLE AMOUNT		-	3,22,712/-	Rs.3,22,712/-
SGST		-	9%	Rs.29044.08/-
CGST			9%	Rs.29044.08/-
AMOUNT WITH GST		-	3,80,800.16/-	Rs.3,80,800.16/-
TOTAL AMOUNT IN WORDS		-	-	THREE LAC EIGHTY THOUSAND EIGHT HUNDRED ONLY

THANK YOU FOR YOUR BUSINESS!!

SRUSHTI P.
Manager,
Build My Project.

Web: www.bmpcourses.in   Mob:+91 8850809176/+91 7977543839   Email:buildmyprojects@gmail.com

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

PROFORMA INVOICE

BUILDMYPROJECT
Way To Automation

BUILD MY PROJECT

COMPANY NAME: Build My Project
ADDRESS: 103, Nehate Niwas, Dr. R. P Road, Domb East-
STATE CODE: 421201
GSTIN 27BAKPT9317C1ZF
BANKING DETAILS
Name: Build My Project
Branch: Tilak Nagar, Dombivli
A/C No.: 60317074910
IFSC Code: MAHB0000635

CUSTOMER NAME: Geethanjali College of Engineering, Hyderabad
ADRESS: heeryal Village, Keesara Mandal, Hyderabad, Telangana 501301
STATE CODE: 501301

PROJECT/SERVICE: 8 AXIS HUMANOID ROBOT

INVOICE NO: BMP041201
INVOICE DATE: 04-12-19

Sr. No.	Name of product & Description	Qty,	PRICE	AMOUNT INR	
1.	High capacity Actuators for Neck, Shoulders, Thumb, Elbow (	8	6,700	53,600	
2.	Drivers, (L298N)	4	4,000/-	16,000/-	✗ NOT WORK
3.	3 D printed Parts	-	70,000	70,000/-	
4.	Controller	1	4,500/-	4,500/-	
5.	Lower body part with rover	1	70,000/-	70,000/-	
6.	Software & designing	-	1,20,000	1,20,000/-	
7.	Upper Body Part with Fabrication		70,000/-	70,000/-	
8.	Electronic parts		52,924/-	52,924/-	
TOTAL				4,57024	
DISCOUNTED AMOUNT				1,34,312	
TOTAL PAYABLE AMOUNT				3,22,712	
SGST			9%	29044.08	
CGST			9%	29044.08	
AMOUNT WITH GST				3,80,800.16/	
TOTAL PAYABLE AMOUNT IN WORDS				THREE LAC EIGHTY THOUSAND EIGHT HUNDRED ONLY	

TERMS: 100% PAYMENT BEFORE DISPATCHED

THANK YOU FOR YOUR BUSINESS!!

Purchase order from Build My Project.
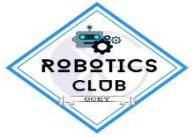
Phone 040-32519687
Fax: +91-40-24220320
Website : www.geethanjaliinstitutions.com

Geethanjali

Geethanjali College of Engineering and Technology

(Accredited by NBA, Approved by AICTE, New Delhi and Affiliated to JNTU, Hyderabad)
Sy.No. 33 & 34, Cheeryal (V); Keesara (M), Ranga Reddy District. - 501 301.

PURCHASE ORDER

GCET/ROBOTICS LAB/PO/2/19-20

Date: 5/12/2019

To,

M/s. Build My Project.
103, Nechate Niwas,
Dr. R.P. Road, Domb East,
Mumbai - 421201

Sub: Purchase of Humanoid Robot– Reg.

With reference to your quotation cited above and personal negotiations had with you, we are pleased to place the purchase order on your firm for the following items, as per specifications, terms & conditions indicated.

S.No	Name of the Product	Qty	Amount
1	High capacity Actuators for Neck, Shoulders, Thumb, Elbow with Motor Driver	1	1,50,000.00
2	Electro – Mechanical Parts	1	2,00,000.00
3	Fabrication of the Bot	1	2,05,000.00
4	Electrical Configuration	1	52,000.00
	Total Amount		6,07,000.00
	Discounted Amount		2,84,288.00
	Total		3,22,712.00
	GST		58,088.16
	Total Amount with GST		3,80,800.16

17

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

IFSC Code: MAHB0000055

कनरा बैंक Canara Bank

HYDERABAD ABID ROAD SPLSD MID CORP BRANC Branch
HYDERABAD TELANGANA 500004
IFSC : CNRB0004926

Valid for three months only from the date of instrument

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Pay **Build My Project**

या धारक को Or Bearer

Rupees रुपये **One lath Ninety Thousand only**

अदा करें ₹ 1,90,000

A/c. No. 0606256555580

309011

Payable at par at all our branches in India

For TEJA EDUCATIONAL SOCIETY

Authorised signatory
Please sign above

⑈309011⑈ 5000150701: 000025⑈ 30

Payment Details

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

BUILDMYPROJECT
Way To Automation

TAX INVOICE

BUILD MY PROJECT

COMPANY NAME: Build My Project
ADDRESS: 103, Nehate Niwas, Dr. R. P Road, Domb East-
STATE CODE: 421201
GSTIN. 27BAKPT9317C1ZF
BANKING DETAILS
Name: Build My Project
Branch: Tilak Nagar, Dombivli
A/C No.: 60317074910
IFSC Code: MAHB0000635

CUSTOMER NAME: Geethanjali College of Engineering, Hyderabad
ADRESS: heeryal Village, Keesara Mandal, Hyderabad, Telangana 501301
STATE CODE: 501301

PROJECT/SERVICE: 5ft. 8AXIS HUMANOID ROBOT

INVOICE NO. BMP230601
INVOICE DATE: 23/06/2020

Sr. No.	Name of product & Description	Qty.	PRICE	AMOUNT INR
1.	5ft. 8 AXIS HUMANOID ROBOT	1	4,57,024/-	Rs.4,57024/-
TOTAL		-	4,57024/-	Rs.4,57024/-
DISCOUNTED AMOUNT		-	1,34,312/-	Rs.1,34,312/-
TOTAL PAYABLE AMOUNT		-	3,22,712/-	Rs.3,22,712/-
SGST			9%	Rs.29044.08/-
CGST		-	9%	Rs.29044.08/-
AMOUNT WITH GST		-	3,80,800.16/-	Rs.3,80,800.16/-
AMOUNT IN WORDS		-	-	THREE LAC EIGHTY THOUSAND EIGHT HUNDRED ONLY
TOTAL AMOUNT RECEIVED		-	1,90,000/-	Rs.1,90,000/-
REMAINING AMOUNT		-	1,90,800/-	Rs.1,90,800/-

THANK YOU FOR YOUR BUSINESS!!

Purchase & Stores
Goods Received
GR No. ___061___
Date ___19.8.2020___

Purchased by ___ Dept. of CSE
Inspected by K. Laxma
Veryfied by ___
15/09/2020

BUILD MY PROJECT
THANE
400 603

SRUSHTI P.
Manager,
Build My Project.

w.bmpcourses.in   Mob:+91 8850809176/+91 7977543839   Email:buildmyprojects@gmail.com

Acknowledgment on Payment of 1, 90,000.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

TEJA EDUCATIONAL SOCIETY(GCET)
Sub-Ledger Build My Project 01-04-2020 To 31-03-2021

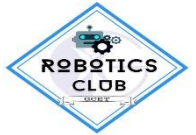| Date	Voucher	Cheq. No	Account	Debit	Credit	Balance	Narration
Build My Project							
			Opening Balance	190,000.00		190000.00Dr	
09-16-2020	Jrn:290		Robotics Laboratory Equipment (CSE		380,800.00	190800.00Cr	Twds.Robot spares-CSE-Robotics Lab-Bill No.BMP230601/23.6.20
			)				
09-22-2020	Pmt:822	620666	CANARA BANK-(OD-A/c.No:55580-TEJA)	190,800.00			Towards Paid for Due Bill
		Total (Rup		380,800.00	380,800.00		

Complete Bill Summary.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.
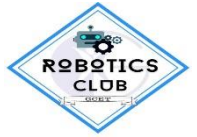
2) **MOU with Smart Bridge Robotics Learning and Development center and Training with ROS software**

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

2020- 21

Robotic Training Module-1:- (7-days 5-hours per day / online mode):-
AS per the MOU of Smart Bridge Module-1 Training is scheduled from 06-01-2021 to 18-01-2021.

Fwd: Training Schedule 〉 Inbox x

Durga Prasad Bethi <durgaprasad@thesmartbridge.com>
to me ▾

Jan 2, 2021, 11:03 AM ☆

--------- Forwarded message ---------
From: Durga Prasad Bethi <durgaprasad@thesmartbridge.com>
Date: Thu, Dec 3, 2020, 1:49 PM
Subject: Re: Training Schedule
To: Jai Prakash <jai@thesmartbridge.com>
Cc: Madhusudan Veldanda <madhuveldanda.cse@gcet.edu.in>, Amarender Katkam <amar@thesmartbridge.com>, Narsimulu Marepalli <narsimulu@thesmartbridge.com>

Hello sir,

Please find the attachment of the Student Learning path for the Robotics L&D Center and Let me know if you have any questions or concerns. In the meantime can you please provide the student's details of those who are going to attend this program.

Thanks & Regards,

On Thu, Dec 3, 2020 at 11:45 AM Jai Prakash <jai@thesmartbridge.com> wrote:
  Hello Sir,

  Thank you for informing us about the changes in the program schedule.

  We are ready to support you in executing this program effectively online and also as we have already completed 4 days of training for the previous batch, But as we are going to deal with a new set of students we will be starting from basics again so that there won't be any problem for the students.

  As we are looking at a long term relationship with your esteemed organization we are happy to support you in all means whenever required.

  @Durga Prasad Bethi Please share the training schedule as discussed.

  On Thu, Dec 3, 2020 at 11:04 AM Madhusudan Veldanda <madhuveldanda.cse@gcet.edu.in> wrote:
    Dear sir,
    It is understood that the earlier training schedule was interrupted due to the onset of the covid pandemic and the earlier batch of students have now graduated. In this regard it is requested that the training may be imparted to the new batch of students afresh. I request you to share the revised training schedule keeping in mind that it is most likely going to be in the online mode.
    Once we receive the schedule we will fit it accordingly into our academic schedule.
    Thank you,

    Madhusudan Veldanda
    Dean - School of Computer Science and Informatics
    Geethanjali College of Engineering and Technology
    9885096285

--
Regards,
Jai Prakash Netha
Program Manager - SIP2020,
Lead Academia Relations.
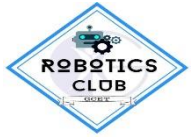
Mail communication with Smart Bridge people.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Robotic Club Student List:-

Geethanjali College of Engineering and Technology
Robotics Learning & Development Center Training
Student List

Sno	Name	Roll No	Section	Mail-id	#no
1	B. Abhishek	18R11A0554	CSE – 3B	abhishekbhemisetty@gmail.com	9704513447
2	T. Vishnuvardhan Reddy	18R11A0592	CSE – 3B	vishnuvardhanreddy24112000@gmail.com	6301625790
3	Saikrupachary	18R11A0555	CSE – 3B	sai.arendra@gmail.com	8367364924
4	Md. Afreen	18R11A0581	CSE – 3B	mdafreen99@gmail.com	7673992089
5	Purali lipika	18R11A0587	CSE -3B	purali.lipika@gmail.com	79957 35742
6	K. Ashok Gajapathi Raju	18R11A05B7	CSE – 3C	ashokgajapathiraj@gmail.com	9000775850
7	Pola Sumanth	18R11A05D1	CSE – 3C	sumanthpola959@gmail.com	9553224619
8	Manikanta	19R11A0535	CSE-2A	sambarapumani@gmail.com	8184865856
9	Vaishnavi Gandhi	19R11A0563	CSE-2B	gandhivaishnavi29@gmail.com	7981264853
10	LIKITHA MANDAVA	19R11A05B9	CSE-2C	Likithachowdary1902@gmail.com	9390977228
11	P.Naren Chary	19R11A0585	CSE-2B	nagoju.naren@gmail.com	8341252589
12	Kevin	19R11AO5M6	CSE-2E	kevinbryant2931@gmail.com	8074067032
13	Sunny Raj	19R11A05N4	CSE-2E	mysonsunnyraj@gmail.com	9705258299
14	Rajya Lakshmi	19R11AO5L4	CSE-2E	rajyalakshmideviduggirala@gmail.com	7330800672
15	Rachapudi Jayani	19R11AO5J5	CSE-2D	jayani2903@gmail.com	7981031392
16	Puvvada Abhinaya	19R11AO5J4	CSE-2D	puvvadaabhinayachowdary@gmail.com	9912633500
17	SRAVANI MUSTYALA	19R11A05C4	CSE-2C	Sravanimustyala02@gmail.com	70939 70362
18	PANYAM BADRINATH REDDY	19R11A05C9	CSE-2C	panyambadri3725@gmail.com	9032983092
19	TADEM MANVITHA	19R11A05D9	CSE-2C	manvithatadem@gmail.com	7396910073
20	LIKKI ABHINAY REDDY	19R11A05B6	CSE-2C	abhinay@ieee.org	93907 76072
21	Vinay Sarthk	19R11AO5P9	CSE-2E	vinay.vodapalli@gmail.com	8309498874
1	Uber Qadir Dar	19R11A0240	EEE-II	19r11a0240@gcet.edu.in	9381368614
2	B. Prem Kumar Reddy	20R15A0226	EEE-II	20r15a0226@gcet.edu.in	7330918791
3	M.vamshi yuvaraj	20R15Ao217	EEE-II	20r15ao217@gcet.edu.in	9121788190
4	Nagaraj Kathi	20R15A0238	EEE-II	20r15a0238@gcet.edu.in	8686552322
5	C S SHASHANK	19R11A0211	EEE-II	19r11a0211@gcet.edu.in	9398482580
1	K.Vamshi Krishna	18R11A04M8	ECE-3E	vamshi190501@gmail.com	9700488532
2	G.Harshith	18R11A04M0	ECE-3E	harishith.gade_123@gmail.com	8074244734
3	P.Harsha	18R11A04P1	ECE-3E	sriharsha61921@gmail.com	6304309022
4	V.Shivani	18R11A04P7	ECE-3E	vemilashivani1305@gmail.com	6302831563
5	Y.Srija	18R11A04P8	ECE-3E	srijayadavalli@gmail.com	8143213333
6	R.Divya	18R11A04C7	ECE-3C	divyaregalla001@gmail.com	8367545439
7	Beeram Ankitha Manisri	19R11A04E7	ECE-II	beeramankitha16@gmail.com	7981185616

8	B.R.Madhavi	19R11A04E5	ECE-II	brmadhavi02@gmail.com	9391885910
9	P.Hemanth	19R11A0486	ECE-II	hemanthpuppala3@gmail.com	8790078951
10	Akshitha Cheerla	19R11A04F0	ECE-II	akshithasrinivascheerla@gmailCom	8008543806
11	T.Vasavi Sri Lakshmi	19R11A04J9	ECE-II	tumuluruvasavisrilakshmi@gmail.com	8096578846
12	Abhishek.p	19R11A04H6	ECE-II	kbhishekponnamofficeial07@gmail.com	6281907581
13	sruthi.Ch	19R11A04F2	ECE-II	sruthichilukuri143@gmail.com	7702291308
14	V. Sumanth Kumar Reddy	19R11A04	ECE-II	sumanthbhuvan123@gmail.com	7995725897
1	ANCHURI HARISH KUMAR GUPTA	18R11A0364	Mech-3B	harishchuri44@gmail.com	9059025435
2	KOPPULA ANUDEEP REDDY	18R11A0327	Mech-3A	anudeepreddykoppula@gmail.com	9010862587
3	GOLLAKOTI V V S MURTHY	18R11A0378	Mech-3B	murthygallakoti85@gmail.com	8374653205
4	BORRA LAKSHMI MANASA	18R11A0310	Mech-3A	barramanasal@gmail.com	9493410454
5	Mr. CH N A S P B SRINIVAS	19R11A0307	Mech-2A	chsrinivas8C@gmail.com	9652122947
6	Mr. VAPPANGI UMESH JAYACHAND	19R11A0379	Mech-2B	umeshvoppangi@gmail.com	9866706660
7	Mr. P SRIMANNARAYANA	19R11A0370	Mech-2B	sriman.paturi@gmail.com	9701048217
8	Mr. ALA UDAY KIRAN	19R11A0301	Mech-2A	alaudaykiran1420@gmail.com	8688450915
9	Mr. METTU AAKASH REDDY	19R11A0328	Mech-2A	reddyaakash38@gmail.com	9542989679
10	Mr. GADDAM PAVAN REDDY	19R11A0353	Mech-2B	pavanreddy2704@gmail.com	6305787192

Geethanjali College of Engineering and Technology
Robotics Learning & Development Center Training
Faculty List

Sno	Name	Branch	Mail-id	#no
1	J.UmaMahesh	CSE	umamaheshsjcet@gmail.com	83748 78521
2	K.Vijay Kumar	CSE	kamdhivijay@gmail.com	9966155572
3	G.Praveen Kumar	CSE	gopagonipraveen@gmail.com	9704051435
4	M shiva prasad	CSE	mshivaprasad.cse@gcet.edu.in	9989647029
5	Ch.Sanddep Kumar	ECE	sanddep.ece414@gmail.com	8978042911
6	M.Anand	ECE	svanad50@gmail.com	9441366209
7	A.Subramanyam	ECE	subramanyamradyula@gmail.com	9000395815
8	M.Prasahnth Kumar	EEE	masadiprashanth@gmail.com	8143333526
9	PVR GIRISHKUMAR	ME	pvrgirishkumar.me@gcet.edu.in.	9866522133
10	B .Anitha	ME	banitha.me@gcet.edu.in	9963523160

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Robotics Learning and Development Center Training Zoom Invitation 📨 Inbox x

Durga Prasad Bethi <durgaprasad@thesmartbridge.com>   Wed, Jan 6, 2021, 11:11 AM ☆
to umamaheshsjcet, kamdhivijay, me, mshivaprasad.cse, sanddep.ece414, svanad50, subramanyamradyula, masadiprashanth, pvrgirishkumar.me, laxmireddyperam.me, swathiveldanda, Gnaneshwar, Madhusudan ▾

Hi there,

You are invited to a Zoom meeting.
When: Jan 6, 2021 05:30 PM Mumbai, Kolkata, New Delhi

Register in advance for this meeting:
https://us02web.zoom.us/meeting/register/tZwocOyhqTstE9Ui1zb7wpepoYiHKlVwaNNE

After registering, you will receive a confirmation email containing information about joining the meeting.

And you are invited to join the Slack Channel for Communication with us.

Thanks & Regards,

Durga Prasad Bethi
Lead Robotics Engineer

Robotics Learning and Development Center Training Zoom Invitation 📨 Inbox x

Durga Prasad Bethi <durgaprasad@thesmartbridge.com>   Fri, Jan 8, 2021, 12:40 PM
to banitha.me, me ▾

Hi there,

You are invited to a Zoom meeting.
When: Jan 6, 2021 05:30 PM Mumbai, Kolkata, New Delhi

Register in advance for this meeting:
https://us02web.zoom.us/meeting/register/tZwocOyhqTstE9Ui1zb7wpepoYiHKlVwaNNE

After registering, you will receive a confirmation email containing information about joining the meeting.

Thanks & Regards,

Durga Prasad Bethi
Lead Robotics Engineer

Meeting details for online class.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Attendance:-

<table>
<tr><td colspan="11">Geethanjali College of Engineering and Technology
Robotics Learning & Development Center Training
Attendance (06-01-2021 to 18-01-2021)</td></tr>
<tr><th>Sno</th><th>Name</th><th>RollNo</th><th>Section</th><th>1-6</th><th>1-7</th><th>1-8</th><th>1-9</th><th>1-11</th><th>1-12</th><th>23-Jan</th></tr>
<tr><td>1</td><td>B. Abhishek</td><td>18R11A0554</td><td>CSE – 3B</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>2</td><td>T. Vishnuvardhan Reddy</td><td>18R11A0592</td><td>CSE – 3B</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>NO</td></tr>
<tr><td>3</td><td>Saikrupachary</td><td>18R11A0550</td><td>CSE – 3B</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>NO</td></tr>
<tr><td>4</td><td>Md. Afreen</td><td>18R11A0581</td><td>CSE – 3B</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>NO</td></tr>
<tr><td>5</td><td>Purali lipika</td><td>18R11A0587</td><td>CSE -3B</td><td>yes</td><td>yes</td><td>NO</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>6</td><td>K. Ashok Gajapathi Raju</td><td>18R11A05B7</td><td>CSE – 3C</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>NO</td></tr>
<tr><td>7</td><td>Pola Sumanth</td><td>18R11A05D1</td><td>CSE – 3C</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>8</td><td>Manikanta</td><td>19R11A0535</td><td>CSE-2A</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>9</td><td>Vaishnavi Gandhi</td><td>19R11A0563</td><td>CSE-2B</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>10</td><td>LIKITHA MANDAVA</td><td>19R11A05B9</td><td>CSE-2C</td><td>yes</td><td>NO</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>11</td><td>P.Naren Chary</td><td>19R11A0585</td><td>CSE-2B</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>12</td><td>Kevin</td><td>19R11AO5M6</td><td>CSE-2E</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>NO</td></tr>
<tr><td>13</td><td>Sunny Raj</td><td>19R11A05N4</td><td>CSE-2E</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>14</td><td>Rajya Lakshmi</td><td>19R11AO5L4</td><td>CSE-2E</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>15</td><td>Rachapudi Jayani</td><td>19R11AO5J5</td><td>CSE-2D</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>16</td><td>Puvvada Abhinaya</td><td>19R11AO5J4</td><td>CSE-2D</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>17</td><td>SRAVANI MUSTYALA</td><td>19R11A05C4</td><td>CSE-2C</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>18</td><td>PANYAM BADRINATH REDDY</td><td>19R11A05C9</td><td>CSE-2C</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>NO</td><td>yes</td><td>yes</td></tr>
<tr><td>19</td><td>TADEM MANVITHA(b4)</td><td>19R11A05D9</td><td>CSE-2C</td><td>NO</td><td>NO</td><td>NO</td><td>NO</td><td>NO</td><td>NO</td><td>NO</td></tr>
<tr><td>20</td><td>LIKKI ABHINAY REDDY</td><td>19R11A05B6</td><td>CSE-2C</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td></tr>
<tr><td>21</td><td>Vinay Sarthk</td><td>19R11AO5P9</td><td>CSE-2E</td><td>yes</td><td>NO</td><td>yes</td><td>yes</td><td>yes</td><td>yes</td><td>NO</td></tr>
</table>

22	Uber Qadir Dar	19R11A0240	EEE-II	yes	yes	yes	yes	yes	NO	yes
23	B. Prem Kumar Reddy(B1)	20R15A0226	EEE-II	yes	yes	yes	NO	NO	NO	yes
24	M.vamshi yuvaraj	20R15Ao217	EEE-II	NO	yes	yes	yes	yes	yes	NO
25	Nagaraj Kathi	20R15A0238	EEE-II	yes	yes	NO	NO	yes	NO	yes
26	C S SHASHANK	19R11A0211	EEE-II	yes	yes	yes	yes	yes	yes	yes
27	K.Vamshi Krishna	18R11A04M8	ECE-3E	yes	yes	yes	yes	yes	yes	yes
28	G.Harshith	18R11A04M0	ECE-3E	yes	yes	yes	yes	yes	NO	yes
29	P.Harsha	18R11A04P1	ECE-3E	yes	yes	yes	yes	yes	yes	yes
30	V.Shivani	18R11A04P7	ECE-3E	yes	yes	yes	yes	yes	yes	NO
31	Y.Srija	18R11A04p8	ECE-3E	yes	yes	yes	yes	yes	yes	NO
32	R.Divya	18R11A04C7	ECE-3C	yes	yes	yes	yes	yes	yes	yes
33	Beeram Ankitha Manisri	19R11A04E7	ECE-II	yes	yes	NO	NO	NO	yes	yes
34	B.R.Madhavi	19R11A04E5	ECE-II	yes	yes	yes	NO	NO	yes	NO
35	P.Hemanth	19R11A0486	ECE-II	yes	yes	yes	yes	yes	yes	yes
36	Akshitha Cheerla	19R11A04F0	ECE-II	yes	yes	yes	yes	yes	yes	NO
37	T.Vasavi Sri Lakshmi	19R11A04J9	ECE-II	yes	yes	yes	yes	yes	yes	yes
38	Abhishek.p(B4)	19R11A04H6	ECE-II	NO	NO	yes	yes	NO	yes	yes
39	sruthi.Ch	19R11A04F2	ECE-II	yes	yes	yes	yes	yes	yes	yes
40	V. Sumanth Kumar Reddy	19R11A0494	ECE-II	yes	NO	NO	yes	yes	yes	yes
41	ANCHURI HARISH KUMAR GUPTA	18R11A0364	Mech-3B	NO	NO	yes	yes	yes	yes	yes
42	KOPPULA ANUDEEP REDDY	18R11A0327	Mech-3A	yes	yes	yes	yes	yes	yes	NO
43	GOLLAKOTI V V S MURTHY	18R11A0378	Mech-3B	yes	yes	yes	yes	NO	NO	yes
44	BORRA LAKSHMI MANASA(b2)	18R11A0310	Mech-3A	NO	NO	NO	NO	NO	NO	yes
45	Mr. CH N A S P B SRINIVAS	19R11A0307	Mech-2A	yes	yes	yes	yes	yes	yes	yes
46	Mr. VAPPANGI UMESH JAYACHAND	19R11A0379	Mech-2B	yes	yes	yes	yes	yes	yes	yes
47	Mr. P SRIMANNARAYANA	19R11A0370	Mech-2B	yes	yes	yes	yes	yes	yes	yes
48	Mr. ALA UDAY KIRAN	19R11A0301	Mech-2A	NO	yes	yes	yes	yes	NO	NO
49	Mr. METTU AAKASH REDDY	19R11A0328	Mech-2A	yes	yes	yes	yes	NO	NO	yes

#	Name	Roll No	Class							
50	Mr. GADDAM PAVAN REDDY	19R11A0353(b3)	Mech-2B	NO	NO	NO	yes	NO	NO	NO
51	Oregunta Sai Varun	19R11A0329	Mech-2A	NO	NO	NO	yes	yes	yes	yes

	Faculty									
1	J.UmaMahesh		CSE	yes	yes	yes	yes	yes	yes	NO
3	G.Praveen Kumar		CSE	yes	yes	yes	yes	yes	yes	yes
4	M shiva prasad		CSE	yes	yes	yes	yes	NO	yes	yes
5	Ch.Sanddep Kumar		ECE	yes	yes	yes	yes	NO	NO	NO
6	M.Anand		ECE	yes	yes	yes	yes	yes	yes	NO
7	A.Subramanyam		ECE	NO	NO	yes	NO	NO	NO	NO
8	M.Prasahnth Kumar		EEE	yes	yes	yes	yes	NO	yes	NO
9	PVR GIRISHKUMAR		ME	yes	yes	NO	yes	yes	NO	NO
10	B .Anitha		ME	NO	NO	yes	yes	yes	NO	yes

Topics to be coved:-

SMARTBRIDGE

Learning and Development center Learning Path

Day	Module	Sub Topics	Hrs.
Basic Training on ROS - One Week			
Day - 1	Introduction to Robotics	• Introduction to Robotics • Applications of Robotics in various Industries • Classification of Robotics • Manipulators classification based on Joint Types • Architecture of Intelligent Robots and Robotic systems • Important Considerations of robotics project • Robot Manufacturing company's • Open Source ROS Based Robots	3 Hrs.
Day - 2	Linux for Robotics	• Introduction to Linux • Basic Linux Commands • Advanced Utilities • Installation of IDLE	3 Hrs.
Day - 3	Python for Robotics	• Introduction to Python • Python Basics • Python Data Structures • Python Programming Fundamentals • Python - Files I/O • Python - Object Oriented Programming	3 Hrs.
Day - 4	Introductions to ROS	• Introductions to ROS • Importance of ROS in industries • Installation of ROS Melodic and its packages • ROS file system configuration • Basic physics properties of Robotics • Working with Existing ROS Packages	3 Hrs.
Day - 5	ROS Topics, Services and Actions	• Introduction to ROS Topics • Created a ROS Topics • Introduction to ROS Services • Creating ROS Services • Introduction to Actions • Creating ROS Actions	3 Hrs.
Day - 6	Turtlebot3 Burger	• Introduction to Turtlebot3 Burger • Parts of Turtlebot3 Burger • Introduction to simulation environments • Connecting Real Robot with Remote Computer • Basic Operations with Turtlebot3 Burger	3 Hrs.

Robotic Training Module-2 (11-days 3-hours per day Hybrid mode):-

After completion of Module-1 Training Module-2 started in Offline mode from 18-03-2021 to 15-04-2021 (Thursday, Friday, and Saturday from 1:30 P.M to 4:30 P.M), but due to COIVD again Training was done online mode.

Requesting for Module-2 Training.

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Geethanjali College of Engineering and Technology
Robotics Learning & Development Center Training

Date	DAY/Time	1:00 P.M to 4:30 P.M
		Module-2
18-03-2021	THU	ROS Robot modelling using URDF and Xacro
19-03-2021	FRI	Creating 3D modeled autonomous Robot Using URDF
20-03-2021	SAT	Integration of sensors to the Robot
25-03-2021	THU	Simulation using Gazebo simulator
26-03-2021	FRI	Robot Indoor mapping and navigation Using Gazebo
27-03-2021	SAT	Integration of open CV to the simulated Robot
04-01-2021	THU	Applying Intelligence to the Robot using AI algorithm
04-02-2021	FRI	Introduction to ROS Manipulation
04-03-2021	SAT	Kinematic and Dynamic analysis of the Industrial manipulator
04-08-2021	THU	Creating Moveit package for Industrial Robot
04-09-2021	FRI	Creating Moveit package for Industrial Robot
04-10-2021	SAT	Applying Moveit package to URDF modelled Robot
		Module-3
15-04-2021	THU	Introduction to Mechanical Design
16-04-2021	FRI	Basic Mechanical Design Calculations for Robot
17-04-2021	SAT	Robot Design using Mechanical 3D Modelling Software's
22-04-2021	THU	Hardware selection and Procurement & Testing the Hardware with Individual components
23-04-2021	FRI	Introduction to 3D Printing
24-04-2021	SAT	3D printing Quality Settings
29-04-2021	THU	3D printing for necessary components
30-04-2021	FRI	
	SAT	
05-06-2021	THU	**Manufacture the required mechanical links**
05-07-2021	FRI	**Robot Assembly using necessary accessories**
05-08-2021	SAT	**Testing the Robot**
		Project Explanation Demo

Schedule Details

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
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Attendance:-
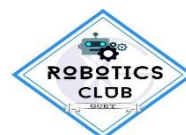
S n o	Name	StuNo	Section	18/03	19//03	20/03	25/03	26/03	27/03	01-Apr	08-Apr	09-Apr	10-Apr	15-Apr
	Geethanjali College of Engineering and Technology Robotics Learning & Development Center Training Attendance (18-3-2021 to 08-05-2021)													
1	Borra Lakshmi Manasa	18R11A0310	Mech-3A	P	P	A	p	P	P	P	P	p	A	P
2	Koppula Anudeep Reddy	18R11A0327	Mech-3A	A	A	A	A	A	A	A	A	A	A	A
3	Anchuri Harish Kumar Gupta	18R11A0364	Mech-3B	P	P	A	p	P	P	P	P	P	P	P
4	Gollakoti V V S Murthy	18R11A0378	Mech-3B	A	A	P	P	A	A		A	A	A	A
5	R.Divya	18R11A04C7	ECE-3C	A	A	A	A	P	P	P	P	P	P	P
6	G.Harshith	18R11A04M0	ECE-3E	A	P	P	P	P	P	P	P	P	A	A
7	K.Vamshi Krishna	18R11A04M8	ECE-3E	P	P	A	p	P	P	p	P	P	P	P
8	P.Harsha	18R11A04P1	ECE-3E	P	P	P	P	P	P	p	P	P	A	P
9	V.Shivani	18R11A04P7	ECE-3E	P	P	P	P	A	A	P	P	P	P	A
10	Y.Srija	18R11A04P8	ECE-3E	P	P	A	p	p	p	P	P	P	A	A
11	Saikrupachary	18R11A0550	CSE – 3B	P	P	P	P	A	P	P	P	P	A	P
12	B. Abhishek	18R11A0554	CSE – 3B	P	P	P	P	P	P	P	P	P	A	A
13	Mohammed Afreen	18R11A0581	CSE – 3B	P	P	P	P	P	P	P	P	P	P	P
14	Purali Lipika	18R11A0587	CSE -3B	P	P	P	P	P	P	p	P	P	P	P
15	T. Vishnuvardhan Reddy	18R11A0592	CSE – 3B	P	P	P	P	p	p	P	P	P	A	P

16	K. Ashok Gajapathi Raju	18R11A05B7	CSE – 3C	P	P	P	P	A	P	p	P	P	A	A
17	Pola Sumanth	18R11A05D1	CSE – 3C	P	A	P	P	p	p	p	P	P	A	A
18	C S Shashank	19R11A0211	EEE-II	P	P	P	P	A	A	P	P	P	P	P
19	Uber Qadir Dar	19R11A0240	EEE-II	P	P	P	P	P	P	P	P	p	P	P
20	Mr. Ala Uday Kiran	19R11A0301	Mech-2A	P	P	P	P	A	A	a	A	A	A	A
21	Mr. Ch N A S P B Srinivas	19R11A0307	Mech-2A	P	P	P	P	P	P	p	P	p	A	P
22	Mr. Mettu Aakash Reddy	19R11A0328	Mech-2A	P	P	A	A	A	P	p	P	P	A	p
23	Oregunta Sai Varun	19R11A0329	Mech-2A	P	P	P	P	P	P	P	P	P	A	P
24	B.Akhil	19R11A0348	Mech-2B	A	A	P	P	A	A	A	A	A	A	A
25	Mr. Gaddam Pavan Reddy	19R11A0353	Mech-2B	P	P	P	P	A	P	P	P	A	P	P
26	Mr. P Srimannarayana	19R11A0370	Mech-2B	P	P	A	A	A	A	p	P	P	A	P
27	Mr. Vappangi Umesh Jayachand	19R11A0379	Mech-2B	P	P	P	P	P	P	P	P	P	P	P
28	P.Hemanth	19R11A0486	ECE-II	P	A	P	P	A	P	P	P	P	P	A
29	V. Sumanth Kumar Reddy	19R11A0494	ECE-II	A	A	A	A	A	A	p	p	A	A	A
30	B.R.Madhavi	19R11A04E5	ECE-II	P	P	A	A	A	A	P	P	P	P	P
31	Beeram Ankitha Manisri	19R11A04E7	ECE-II	P	P	A	p	P	P	p	P	p	A	A
32	Akshitha Cheerla	19R11A04F0	ECE-II	P	P	P	P	A	A	P	P	P	A	P
33	Sruthi.Ch	19R11A04F2	ECE-II	P	P	P	P	A	A	p	A	P	A	P
34	Abhishek.P	19R11A04H6	ECE-II	P	P	P	P	A	A	P	P	P	A	A

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35	T.Vasavi Sri Lakshmi	19R11A 04J9	ECE-II	P	P	P	A	A	P	P	P	P	A	P
36	Manikanta	19R11A 0535	CSE-2A	P	P	P	P	A	P	p	P	P	A	A
37	Vaishnavi Gandhi	19R11A 0563	CSE-2B	P	P	P	P	A	P	P	A	P	A	P
38	P.Naren Chary	19R11A 0585	CSE-2B	P	P	P	P	A	P	P	P	P	P	A
39	Likki Abhinay Reddy	19R11A 05B6	CSE-2C	P	P	P	P	P	P	P	P	P	P	P
40	Likitha Mandava	19R11A 05B9	CSE-2C	P	P	P	P	p	p	p	P	P	A	P
41	Sravani Mustyala	19R11A 05C4	CSE-2C	A	P	P	P	P	P	P	P	P	A	P
42	Panyam Badrinath Reddy	19R11A 05C9	CSE-2C	P	P	P	A	A	A	P	P	P	A	P
43	Tadem Manvitha	19R11A 05D9	CSE-2C	P	P	A	A	A	P	A	A	A	A	A
44	G Nandini Laxmi Priya	19R11A 05L5	CSE-E							p	P	A	P	P
45	N.Kevin Bryant	19R11A 05M6	CSE-2E	A	P	P	P	A	A	p	P	P	A	A
46	Sunny Raj	19R11A 05N4	CSE-2E	A	P	P	P	A	P	P	A	A	A	A
47	Puvvada Abhinaya	19R11A O5J4	CSE-2D	A	P	A	A	P	P	P	P	P	P	p
48	Rachapudi Jayani	19R11A O5J5	CSE-2D	A	A	A	A	P	P	P	P	P	A	A
49	Rajya Lakshmi	19R11A O5L4	CSE-2E	P	P	P	P	P	P	P	P	P	A	p
50	Vinay Vodapalli	19R11A O5P9	CSE-2E	P	A	P	P	A	P	P	A	A	A	A
51	M.Vamshi Yuvaraj	20R15A 0217	EEE-II	P	P	P	P	P	P	P	P	P	A	P
52	B. Prem Kumar Reddy	20R15A 0226	EEE-II	A	A	A	A	A	A	A	A	A	A	A
53	Nagaraj Kathi	20R15A 0238	EEE-II	P	P	A	A	A	A	A	A	A	A	A

Faculty

1	K.Vijay Kumar	CSE	kamdhivijay@gmail.com	P	P	P	P	P	P	P	P	P	P	P
2	G.Praveen Kumar	CSE	gopagonipraveen@gmail.com	P	P	P	P	P	P	P	P	P	P	P

3	M shiva prasad	CSE	mshivaprasad.cse@gcet.edu.in	P	P	P	P	P	P	P	P	P	P	P
4	Ch.Sanddep Kumar	ECE	sanddep.ece414@gmail.com	A	P	P	A	P	P	A	A	A	P	P
5	M.Anand	ECE	svanad50@gmail.com	A	P	P	A	A	A	A	A	A	A	A
6	A.Subramanyam	ECE	subramanyamradyula@gmail.com	P	P	P	A	A	A	A	A	A	A	A
7	M.Prasahnth Kumar	EEE	masadiprashanth@gmail.com	A	P	P	A	A	P	A	A	A	A	A
8	Sapthagiri	ME	surasapthagiri.me@gcet.edu.in	P	P	P	P	P	P	P	P	P	P	A
9	Satya Narayana	ME	satyamech343@gcet.edu.in	P	A	A	P	A	P	A	P	A	A	A
10	k.Praveen	ME								p	P	A	A	P

Topics:-

SMARTBRIDGE

Learning and Development center Learning Path

Day	Module	Sub Topics	Hrs.
Intermediate Training on ROS - Two Weeks			
Day - 1	ROS Robot modelling using URDF and Xacro	• Introduction to URDF and Xacro • Creating Links, Joints, Sensors, Transmissions etc	3 Hrs.
Day - 2	Creating 3D modeled autonomous Robot Using URDF	• Creating ROS Package for URDF Description • Creating Launch files for load the Robot in the Gazebo simulator and Rviz • Control the robot by publishing ROS messages • Control the Robot using Keyboard	3 Hrs.
Day - 3	Integration of sensors to the Robot	• Introduction to the Sensors • Importance of sensors in the Robotics • Integrating Laser Distance Sensor to the Robot • Visualizing the Laser Distance sensors Data • Integrating the RGB Camera to the Robot • Visualizing the live RGB data using rqt	3 Hrs.
Day - 4	Simulation using Gazebo simulator	• Introduction to the simulation environment • Introduction to the SDF • Creating custom gazebo environment worlds	3 Hrs.
Day - 5	Robot Indoor mapping and navigation Using Gazebo	• Introduction to Mapping • Introduction to SLAM • Integrating the gmapping package with two wheeled robot • Creating Environment MAP • Saving the Gazebo environment map • Introduction to Navigation • Exploring AMCL Package • Navigating the Two wheeled robot in the created Map	3 Hrs.
Day - 6	Integration of open CV to the simulated Robot	• OpenCV OpenSave Image Files • OpenCV Pixels and Image Structure • OpenCV Image Encoding • OpenCV Video Streams Input • OpenCV Drawing Shapes • CV Bridge for Bridging OpenCV and ROS	3 Hrs.
Day - 7	Applying Intelligence to the Robot using AI algorithm	• Introduction to Artificial Intelligence • Importance of AI in Robotics • working with ML and AI Algorithms • Yolo Object Detection using RGB Camera	3 Hrs.

SMARTBRIDGE
Let's Bridge the Gap

Learning and Development center Learning Path

Day - 8	Introduction to ROS Manipulation	• Introduction ROS Manipulation • Manipulator Terminology • Introduction to Grippers • Classification of Grippers • Open source ROS Manipulator • Architecture of ROS Manipulation	3 Hrs.
Day - 9	Kinematic and Dynamic analysis of the Industrial manipulator	• Introduction to Robot Kinematics and Dynamics • Robot forward Kinematics • Robot Inverse Kinematics • Basic Robot Dynamics Properties calculations	3 Hrs.
Day – 10&11	Creating Moveit package for Industrial Robot	• Introduction to Moveit • Applications with Moveit • Understanding of DOF of a Manipulator • Creating Moveit Package for Franka Emika Panda Manipulator • Testing Basic Operations with the Franka Emika Panda Manipulator • Working with Motion Planning and Trajectories	3 Hrs.
Day - 12	Applying Moveit package to URDF modelled Robot	• Creating a 6 DOF Manipulator with Gripper • Creating Moveit Package • Working with Motion Planning and Trajectories	3 Hrs.

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Batch Details:- In the part of training Students and faculty divided iinto10 –batches and conduct some Assessments.

Geethanjali College of Engineering and Technology
Robotics Learning & Development Center Training

Sno	Batch	Faculty Details	Student Name	Rool Number	Section
1	1	M.ShivaPrasad (9989647029)	GOLLAKOTI V V S MURTHY	18R11A0378	Mech-3B
2			LIKITHA MANDAVA	19R11A05B9	CSE-2C
3			B. Prem Kumar Reddy	20R15A0226	EEE-II
4			Beeram Ankitha Manisri	19R11A04E7	ECE-II
5			Vinay Vodapalli	19R11AO5P9	CSE-2E
6			Rachapudi Jayani	19R11AO5J5	CSE-2D
7	2	A.Subramanyam (9000395815)	Borra Lakshmi Manasa	18R11A0310	Mech-3A
8			Mohammed Afreen	18R11A0581	CSE – 3B
9			N.kevin Bryant	19R11A05M6	CSE-2E
10			Nagaraj Kathi	20R15A0238	EEE-II
11			P.Hemanth	19R11A0486	ECE-II
12	3	Satya Narayana (80961 86121)	Mr. GADDAM PAVAN REDDY	19R11A0353	Mech-2B
13			Purali lipika	18R11A0587	CSE -3B
14			V.Shivani	18R11A04P7	ECE-3E
15			LIKKI ABHINAY REDDY	19R11A05B6	CSE-2C
16			sruthi.Ch	19R11A04F2	ECE-II
17	4	M.Anand (9441366209)	ANCHURI HARISH KUMAR GUPTA	18R11A0364	Mech-3B
18			K. Ashok Gajapathi Raju	18R11A05B7	CSE – 3C
19			M.vamshi yuvaraj	20R15A0217	EEE-II
20			Abhishek.p	19R11A04H6	ECE-II
21			TADEM MANVITHA	19R11A05D9	CSE-2C
22	5	K.Vijay Kumar (9966155572)	Mr. VAPPANGI UMESH JAYACHAND	19R11A0379	Mech-2B
23			Uber Qadir Dar	19R11A0240	EEE-II
24			PANYAM BADRINATH REDDY	19R11A05C9	CSE-2C
25			Mr. P SRIMANNARAYANA	19R11A0370	Mech-2B
26			G.Harshith	18R11A04M0	ECE-3E
27			Y.Srija	18R11A04P8	ECE-3E
28			SRAVANI MUSTYALA	19R11A05C4	CSE-2C
29	6	M.Prasahnth Kumar (81433)33526	Mr. ALA UDAY KIRAN	19R11A0301	Mech-2A
30			Pola Sumanth	18R11A05D1	CSE – 3C
31			Manikanta	19R11A0535	CSE-2A
32			Akshitha Cheerla	19R11A04F0	ECE-II
33			T.Vasavi Sri Lakshmi	19R11A04J9	ECE-II
34	7	Sapthagiri (84990 75588)	Mr. METTU AAKASH REDDY	19R11A0328	Mech-2A
35			K.Vamshi Krishna	18R11A04M8	ECE-3E

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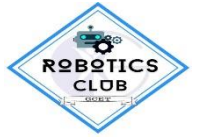# DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.
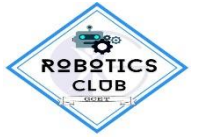
36			T. Vishnuvardhan Reddy	18R11A0592	CSE – 3B
37			Puvvada Abhinaya	19R11AO5J4	CSE-2D
38			B.R.Madhavi	19R11A04E5	ECE-II
39	8	Ch.Sandeep (8978042911)	KOPPULA ANUDEEP REDDY	18R11A0327	Mech-3A
40			C S SHASHANK	19R11A0211	EEE-II
41			Vaishnavi Gandhi	19R11A0563	CSE-2B
42			Saikrupachary	18R11A0550	CSE – 3B
43			V. Sumanth Kumar Reddy	19R11A0494	ECE-II
44	9	G.Praveen Kumar (9704051435)	B. Abhishek	18R11A0554	CSE – 3B
45			P.Harsha	18R11A04P1	ECE-3E
46			P.Naren Chary	19R11A0585	CSE-2B
47			Ch. SRINIVAS	19R11A0307	Mech-2A
48			Oregunta Sai Varun	19R11A0329	Mech-2A
49			Sunny Raj	19R11A05N4	CSE-2E
			B.Akhil	19R11A0348	Mech-2B
			G Nandini Laxmi Priya	19R11A05L5	CSE-E
50			Rajya Lakshmi	19R11AO5L4	CSE-2E
51			R.Divya	18R11A04C7	ECE-3C
52	10	Core Team	B Divya Sai Sathwik	17R11A04A0	ECE - 4C
53			G Rashmi	17R11A04B0	ECE - 4C
54			M Bharat	17R11A04C5	ECE - 4C
55			V Uma Kanth	17R11A04E4	ECE - 4C
56			M Sai Teja Sree	17R11A04C2	ECE - 4C
57			A Surya	17R11A0497	ECE - 4C
58			J Sowjanya Keerthana	17R11A04	ECE - 4B
59			Vaibhav Jaiswal	17R11A02A6	EEE - 4B

Assessment-1 Find out the component's name from the following robot and Explain each and every component's functionality
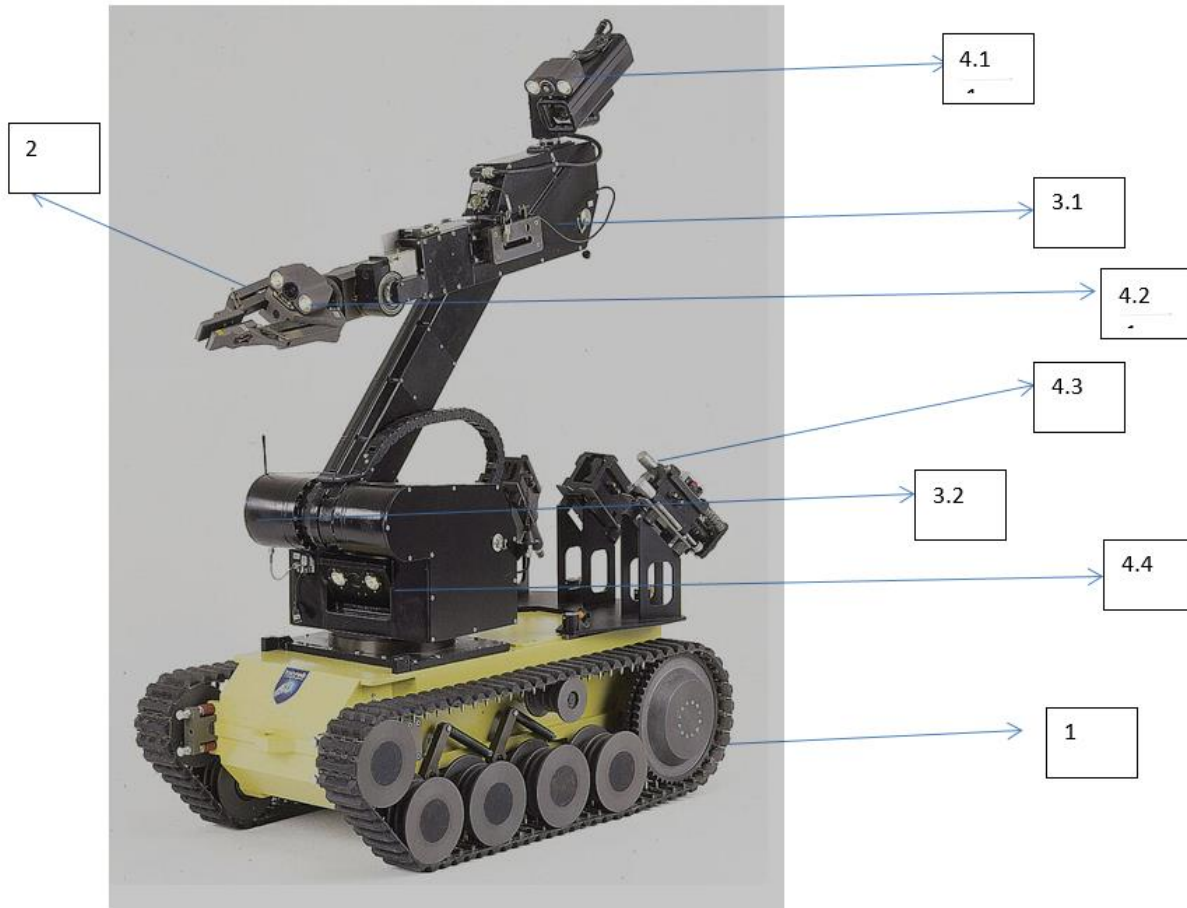
1. **BASE WITH TRACKED WHEEL**

2. **GRIPPER**

3. **JOINTS**

4. **SENSORS**

5. **LINKS**

Description:

1. BASE WITH TRACKED WHEEL: Tracks, also known as threads are best suited for robots in rough and uneven terrain as tracks provide greater traction and reduce slippage.

2. GRIPPER: it's a end effector of the robot used to hold objects and here we are using a double mechanical gripper

3. JOINTS: A part of the manipulator system, which allows a rotation and/or translational degree of freedom of a link of end-effector

4. SENSORS: A sensor is a device that is used to detect objects or changes made in an environment

5. LINKS: A rigid part of a manipulator, which connects adjacent joints.

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DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.
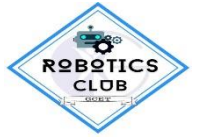
IPAS Challenge:-
Mars Society South Asia brings to you the first-ever Mars Drone Competition - International Planetary Aerial Systems (IPAS) Challenge.

The IPAS Challenge is a competition for university students and challenges to design Mars Aerial System (Vehicle) which shall be fully equipped and mission ready for Operation on Mars. This competition is designed for students to explore their minds and spark the innovative design thinking of Individuals without putting any constraints on available physical resources.

The competition has a Prize Pool of 51,000 INR. The key dates for the competition are as follows

For the rulebook of the competition and further details visit : https://lnkd.in/gHwUtGq

Registration : March 10 – 20, 2021
Prize Pool – 51,000 INR

Registration form link : https://lnkd.in/gQTXJ7f

Hope to have you on-board!

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Set–II

To,
Date:-19-03-2021

The Principal,

Geethanjali College of Engineering &Technology.

Cheeryal, Hyderabad.

Sub: - Requesting to participate in Mars Society South Asia Competition

Respected Sir,

I Praveen Kumar working as an Asst.Professor in CSE Dept. and In-charge for ROBOTICS lab. Sir, Mars Society South Asia conducting Mars Drone Competition-International Planetary Aerial System(IPAS) Challenge. We are planning to participate in this event from our college . The registration fee is Rs.5000 and the equipment cost is approximately Rs.55,000/- Kindly look into the possibility and request you to allow us to participate in this event.

Registration last date :-20-03-2021 .

Prize pool :- 51,000 INR.

Thanking you sir.

Yours Sincerely

Praveen Kumar.G,

Dept. Of CSE.

Requesting letter for Funding

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
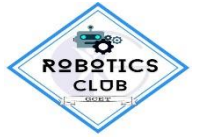## (Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Student List for IPAS

Sno	Participant Name		Team Name	College
1	Pola Sumanth	CSE	Team Vayujith	Geethanjali college of Engineering and technology
2	Sai Krupa Chary Arendra	CSE	Team Vayujith	Geethanjali college of Engineering and technology
3	Abhishek Bhemisetty	CSE	Team Vayujith	Geethanjali college of Engineering and technology
4	T Vishnuvardhan Reddy	CSE	Team Vayujith	Geethanjali college of Engineering and technology
5	G Harshith	ECE	Team Vayujith	Geethanjali college of Engineering and technology
6	K Vamshi Krishna	ECE	Team Vayujith	Geethanjali college of Engineering and technology
7	A Harish Kumar Gupta	MECH	Team Vayujith	Geethanjali college of Engineering and technology
8	Srija	ECE	Team Vayujith	Geethanjali college of Engineering and technology
9	Shivani	MECH	Team Vayujith	Geethanjali college of Engineering and technology
10	P Sri Satya Harsha	ECE	Team Vayujith	Geethanjali college of Engineering and technology
11	Arvind Naik	ECE	Team Vayujith	Geethanjali college of Engineering and technology

Registration and Project Upload Process:-

Acknowledgment of team registration with payment details

Begin forwarded message:

From: Mars Society South Asia <contact@southasia.marssociety.org>
Date: 25 March 2021 at 05:43:21 IST
To: Sumanth Pola <sumanthpola959@gmail.com>
**Subject: Re: Acknowledgement of team registration with payment details.**

Hello Sumanth,

Request you to fill the payment details form as soon as possible.
Payment won't be considered, nor confirmed unless the form is filled.

Link to the form: http://bit.ly/IPASPayment

Regards
Harshit Sharma
Vice President
MSSA

Hello team,
We recently registered for the IPSC challenge with the team name "VAYUJITH" and completed the payment.
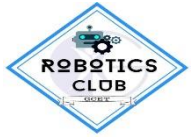please find the payment details below.
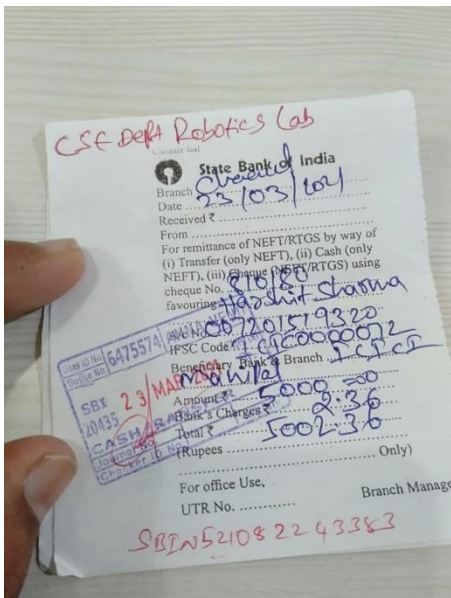
IPAS Challenge : Payment Information
Begin forwarded message:
From: Mars Society South Asia <contact@southasia.marssociety.org>
Date: 22 March 2021 at 14:53:59 IST
To: Mars Society South Asia <contact@southasia.marssociety.org>
Subject: IPAS Challenge : Payment Information

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Dear Teams,

Thank you for registering for the International Planetary Aerial Systems(IPAS) Challenge 2021. As mentioned during pre-registration you are required to pay the registration fee to complete your registration.

For the payment, the details are :

Indian teams : UPI
Amount: INR 5000
ID: hsharma10@upi
International teams :
Amount: 80 USD

PayPal:
paypal.me/HSharma10

Xoom:
Bank : ICICI Bank
IFSC Code - ICIC0000072
Account Number : 007201519320
Name : Harshit Sharma
Address : MIT Hostels, MIT
City : Manipal
State : Karnataka
Phone No.: +91 9001797452
Email : harshitsharma2426@gmail.com

You are **mandatorily required to fill the google form** for you payment to be considered: http://bit.ly/IPASPayment

A confirmation E-Mail will be sent to you within 72-hrs of successful payment, confirming your registration and further steps regarding the competition.

 IPAS CHALLENGE 2021 - Team Details Form
Begin forwarded message:
From: Mars Society South Asia <contact@southasia.marssociety.org>
Date: 25 April 2021 at 19:14:13 IST
To: Mars Society South Asia <contact@southasia.marssociety.org>
Subject: IPAS CHALLENGE 2021 - Team Details Form
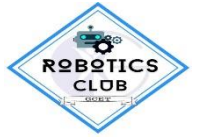
Dear Team,

Kindly, fill the form attached with this email and upload the excel/spreadsheet document pertaining to the team details in the format given in the form. Please make sure that all the details in the document uploaded is correct as it will be used for certificates. The form will close by **2nd May 2021, 23:59 IST**.

Form link: https://forms.gle/6XbgKyxRJK7VYvLa9

Regards,
Anmol Kumar

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Technical Coordinator
Mars Society South Asia

Fwd: Imp: IPAS 2021 : SUBMISSION GUIDELINES
Begin forwarded message:
From: Mars Society South Asia <contact@southasia.marssociety.org>
Date: 2 May 2021 at 22:20:22 IST
To: Mars Society South Asia <contact@southasia.marssociety.org>
Subject: Imp: IPAS 2021 : SUBMISSION GUIDELINES

Dear Teams,

The submission deadline for the International Planetary Aerial Systems Challenge(IPAS) 2021 is right around the corner. Please carefully read the following guidelines regarding the submission procedures.

1. The submission deadline is on 5th May 2021, 23:59 IST. We recommend teams to make their submissions a few hours in advance to avoid last minute glitches. The submission deadline will not be extended under any circumstances, so teams are recommended to make timely submissions. In case of a delay, penalties will be levied according the following scheme:
Before 00:30 6th May 2021 - 2% of the final score
Before 01:00 6th May 2021 - 5% of the final score
After 01:00 6th May 2021 - Submission will not be accepted.

2. The submission form will be available at www.southasia.marssociety.org under the IPAS section. The form will be active from 3rd May, 23:59 IST till closure of submission as mentioned in (1). Teams are recommended to locate the form well in advance.

3. We have noticed that some teams have not submitted their Team Details in the previous Google Form sent to teams. Teams will get One **Last chance to submit team details** during submission. After which details will not be accepted which will result in **certificates not being issued** for such teams. No further requests will be entertained.

4. The EDR needs to be submitted in **PDF format only.** Teams will have to submit their 10 second video as communicated to teams previously in **mp4 format only.** Team details need to be submitted in **Excel format only.**

5. Teams will have to submit the rendered images of their UAVs. Labelled and Unlabelled images are required to be uploaded. Orthographic/isometric views of the UAV as mentioned in EDR guidelines are required to be uploaded. Teams can choose to upload multiple images from different views if they wish to.

6. The top 5 images will be selected by the judges and will be uploaded on our social media handles. The top 3 teams receiving the highest number of likes will receive bonus points accordingly as deemed appropriate by the judges.
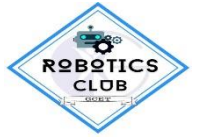
7. Teams are requested to ask for any queries regarding the guidelines in this E-Mail, Submission Form, Submission Elements and Procedures well in advance, as we won't be able to solve your doubts at the last moment. This will help avoid any last minute confusions to teams during submissions. No reason whatsoever will be entertained for delayed submissions.

8. Teams must submit the Google Form only **ONCE.** In case a team submits the form multiple times, only the first submission will be considered. So make sure you've checked everything before submitting.

9. Details regarding announcement of results will be informed in the coming weeks.

We wish you all the best!

Regards,
Mars Society South Asia

IPAS - International Planetary Aerial Systems Challenge 2021 – Submission

Please carefully read the following guidelines regarding the submission procedures.

1. The submission deadline is on 5th May 2021, 23:59 IST. We recommend teams to make their submissions a few hours in advance to avoid last minute glitches. The submission deadline will not be extended under any circumstances, so teams are recommended to make timely submissions. In case of a delay, penalties will be levied according the following scheme: Before 00:30 6th May 2021 - 2% of the final score Before 01:00 6th May 2021 - 5% of the final score After 01:00 6th May 2021 - Submission will not be accepted.

2. The submission form will be available at www.southasia.marssociety.org under the IPAS section. The form will be active from 3rd May, 23:59 IST till closure of submission as mentioned in (1). Teams are recommended to locate the form well in advance.

3. We have noticed that some teams have not submitted their Team Details in the previous Google Form sent to teams. Teams will get One Last chance to submit team details during submission. After which details will not be accepted which will result in certificates not being issued for such teams. No further requests will be entertained.

4. The EDR needs to be submitted in PDF format only. Teams will have to submit their 10 second video as communicated to teams previously in mp4 format only. Team details need to be submitted in Excel format only.

5. Teams will have to submit the rendered images of their UAVs. Labelled and Unlabelled images are required to be uploaded. Orthographic/isometric views of the UAV as mentioned in EDR guidelines are required to be uploaded. Teams can choose to upload multiple images from different views if they wish to.

6. The top 5 images will be selected by the judges and will be uploaded on our social media handles. The top 3 teams receiving the highest number of likes will receive bonus points accordingly as deemed appropriate by the judges.

7. Teams are requested to ask for any queries regarding the guidelines in this E-Mail, Submission Form, Submission Elements and Procedures well in advance, as we won't be able to solve your doubts at the last moment. This will help avoid any last minute confusions to teams during submissions. No reason whatsoever will be entertained for delayed submissions.

8. Teams must submit the Google Form only ONCE. In case a team submits the form multiple times, only the first submission will be considered. So make sure you've checked everything before submitting.

9. Details regarding announcement of results will be informed in the coming weeks.

We wish you all the best!

Email *
sumanthpola959@gmail.com
Team Name *
VAYUJITH
Team E-Mail *
praveenkumar.cse@gcet.edu.in
Team Lead Name *
Pola Sumanth
Team Lead E-Mail *
sumanthpola959@gmail.com

Engineering Design Review(EDR) - PDF Only - FileNameFormat: TeamName_EDR_IPAS2021 *

Result Status:-

Sample Certificates:-

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

MARS SOCIETY SOUTH ASIA — **IPAS CHALLENGE**

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

P Sri Satya Harsha

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge,
organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

MARS SOCIETY SOUTH ASIA — **IPAS CHALLENGE**

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

Shivani

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge,
organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

MARS SOCIETY SOUTH ASIA — **IPAS CHALLENGE**

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

Srija

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge,
organised by Mars Society South Asia during March 10 - May 5, 2021
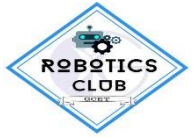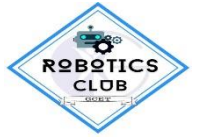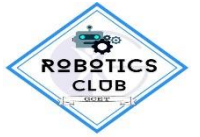
SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

MARS SOCIETY SOUTH ASIA

IPAS CHALLENGE

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

A Harish Kumar Gupta

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge, organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

MARS SOCIETY SOUTH ASIA

IPAS CHALLENGE

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

K Vamshi Krishna

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge, organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

MARS SOCIETY SOUTH ASIA

IPAS CHALLENGE

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

G Harshith

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge, organised by Mars Society South Asia during March 10 - May 5, 2021

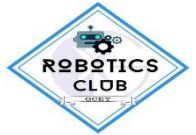**SAGAR DHAKA**
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

T Vishnuvardhan Reddy

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge,

organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

Abhishek Bhemisetty

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge,

organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

MARS SOCIETY SOUTH ASIA   **IPAS CHALLENGE**

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

Sai Krupa Chary Arendra

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge,

organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

MARS SOCIETY SOUTH ASIA   **IPAS CHALLENGE**

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

Pola Sumanth

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge,

organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

MARS SOCIETY SOUTH ASIA   **IPAS CHALLENGE**

INTERNATIONAL PLANETARY AERIAL SYSTEMS CHALLENGE
"Propelling Exploration"

CERTIFICATE OF PARTICIPATION

This certificate is presented to

Arvind Naik

of

Team Vayujith

for participating in the International Planetary Aerial Systems Challenge,

organised by Mars Society South Asia during March 10 - May 5, 2021

SAGAR DHAKA
President, MSSA

JUSTYNA PELC
Judge, IPASC 2021

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

2021-2022

MCEME COMPETITION

Lt Col Prasad Mandgaonkar
Offg Dean, Faculty of Degree Engg
for
Lt Gen TSA Narayanan, AVSM
Commandant, MCEME

Military College of Electronics & Mechanical Engineering,
Tirumalagiri PO,
Secunderabad-500015

30803/CCO/FDE

Sep 2021

Principal, Geetanjali College of Engg and Tech

"ROBOTHON"
INTER COLLEGE ROBOTICS COMPETITION - 2021

Dear Sir/Ma'am

1. The Military College of Electronics and Mechanical Engineering, Secunderabad, is one of the premier institutions of Indian Army, imparting technical and management education in engineering disciplines relevant to weapon systems and equipment to cadets, officers and other ranks of Indian Army, including civilians, with special reference to repair, maintenance and inspection. The college has been awarded with ISO 9001 certification, the Golden Peacock Award and National Training Award for its quality education. The Degree Engg and M Tech offered by this college are recognized by Jawaharlal Nehru University, New Delhi and Jawaharlal Nehru Technological University, Hyderabad.

2. An Inter-College Robotic Competition 'ROBOTHON' will be organised at our college campus during the month of October 2021. The field of Robotics impacts military applications, healthcare applications, transportation, manufacturing, logistics, communication etc and hence it becomes important to synergise the civil-military thoughts to design and develop the robots that can replace humans in executing various tasks in different environments. The aim of the competition is to enable our student fraternity to explore and comprehend the latest trends in Robotics in all fields, cultivate innovative skills and enable them to design and build robots.

3. A maximum of 20 teams from various reputed colleges/ universities in and around Hyderabad will be participating in the competition. Each team will have four members with one team captain. All members of the team must belong to the same college/ institution. However, team members may belong to different disciplines and study. The events to be conducted during the competition are **'Robo Expo'**, **'Guest Lecture on Artificial Intelligence enabled Robotics'** and **'Robo Competition'**. The modalities of each event are elucidated in the pamphlet enclosed. There will be attractive cash prizes for the winner and runner-up team. In addition each participant will receive MCEME 'Certificate of Excellence'. Post culmination of the competition, all the participants will be taken for MCEME tour where the students will witness the current equipment held with Indian Army and the training methodology adopted to maintain these equipment.

4. I am sanguine that you would definitely like to participate and make this event a professionally fruitful, technically inspiring and a value-addition event for our budding engineers. We would be pleased and honoured to have the participation of your students and staff during the competition. Besides stimulating the motivational level of the participants, it would also serve as an apt platform for exchange of ideas and thoughts.

5. We will be grateful if you could intimate the details of participants and staff either through Mobile Nos **8872914168** or **9626342599** or email-id. **shangh.649i@gov.in.**

With warm regards

To
All HODs/Deans
Please arrange to circulate Proceed
in students groups and
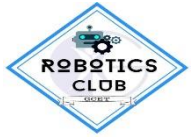encourage them to participate
in large number.

Invitation

ROBOTION
"Boosting Engineering, Science & Technology"

SCOPE
(FOR "ROBOTS" PARTICIPATING IN COMPETITION)

1. **Smart Spherical Robots with Surveillance Capability.** Among diverse types of robots, spherical robots have become increasingly attractive in the last decade. They are believed to have several benefits. First, they have only a single contact point with the ground with minimal friction for locomotion. Therefore, they would be able to save energy for locomotion. Second, the spherical structure makes it possible to move even in tightly constrained spaces. Third, the spherical exoskeleton can protect the inner structure against external shocks or dust. The scope of this robot will be as under:-

- The rolling bot to have inherent dynamic balancing capability that will automatically orient itself in the right opposition when thrown by the user.
- Battery backup of minimum 90 minutes.
- Equipped with camera and microphone for AV recording during surveillance and provide live feed to the user.
- Spherical body to be transparent in nature so as to get a clear picture from the installed camera.
- Rugged, easy to operate and man-packed.

2. **Snake Robot.** Snake robots are a new type of robots, known also as serpentine robots. As the name suggests, these robots possess multiple actuated joints thus multiple degrees of freedom. This gives them superior ability to flex, reach and approach a huge volume in its workspace with infinite number of configurations. The scope of this robot will be as under:-

- It should be a real time design with an advanced control system.
- It must have a dynamic structure which gives the operator the freedom to remove, add and exchange modules freely.
- Equipped with camera and microphone for AV recording during surveillance and provide live feed to the user.
- It should be able to negotiate a gradient of minimum 30 degrees.
- Battery back-up of minimum 90 minutes.

3. **Tree Climbing Robot.** A tree climbing robot has been a topic of great interest to researchers, students and hobbyists to explore the optimum utilisation of the manoeuvrability of a robot. Most of the climbing Robots are designed for climbing urban settings but seldom of Robots are designed for climbing natural environment such as trees. The scope of the robot will be as under:-

- The robot should be able to move on ground as well as climb a tree of diameter minimum 20 cm.
- The robot should climb tree for observation, carrying of payload, area surveillance and early warning.
- The robot should be battery operated and provide live feed from the camera.

- The robot shall negotiate any obstacle in its way of approach.
- Battery backup of minimum 90 minutes.

4. **Bi-Pedal or Two-Legged Robot.** A bipedal walking robot is a type of humanoid robot which mimics like human being and can be programmed to perform some tasks as required. The movement of the robot also can be controlled using a remote controller. The bipedal robot can assist human to carry out tasks or activities in hazardous environment. The scope of the robot will be as under:-

- The robot must have minimum height of 3 feet.
- The movement of the robot to mimic the trajectory of motion of human limb.
- The robot framework to be made of light weight material.
- The robot to be designed for walking, turning left and right and to stand with stability.
- It should be easy to operate and manpacked.
- It should be able to walk on various surfaces.

Military College of Electronics & Mechanical Engineering

Secunderabad

STRENGTH THROUGH EXCELLENCE

ROBOTION
"Boosting Engineering, Science & Technology"

INTER-COLLEGE ROBOTICS COMPETITION -2021

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Date:-17-11-2021

To,

The Principal,

Geethanjali College of Engineering and Technology.

Cheeryal, Hyderabad

Sub - Requesting funds to participate in Military College of Electronics and Mechanical Engineering (MCEME) Robothon Competition

Respected Sir,

I am Praveen Kumar working as an Asst. Professor in CSE Dept. and In-charge for ROBOTICS Lab. Sir. MCEME is conducting a Robothon Competition on 17th and 18th December. It is a prestigious event and institutions such as IIT Hyderabad and BITS Pilani Hyderabad are participating in this event. Honourable Governor of Telangana, Dr Tamilisai Soundararajan is the Chief Guest for this event. We are participating in this competition from our college. The total cost for building the **snake robot** model is approximatelyRs. 62,861. Kindly look into the possibility and request you to grant the funding for this event.

Prize Pool (Competition Category): Rs. 1, 40,000/-

Thanking you Sir,

Yours Sincerely,

Praveen Kumar G.
Dept. Of CSE.

Submitted to Secretary for approval.

Requesting Letter for Funding

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

In the Competition we are participating in two categories   as Two Teams

Robothon
Inter-College Robotics Competition – 2021
Registration Form

1. Name of College/Institute   :   Geethanjali College of Engineering and Technology
2. Number of Teams participating: Two
3. Details of Teams and Mentors along with category of Robot:

S. No	Team & Team Members	Mentor Name	Robot Category	Exhibition / Competition	Contact Number
a	**Team A**		Snake Robot		
	• Sai Varun (ME Dept)	Mr. G Praveen Kumar		Competition	6305174967
	• Harshith (CSE Dept)				9515396181
	• Sunny Raj (CSE Dept				9705258299
	• Abhinav (ECE Dept)				6309441812
b	**Team B**		Service Robot	Exhibition	
	• Vishnu Vardhan Reddy (CSE Dept)	Mr. Shiva Prasad			6301625790
	• SaiKrupa Chary (CSE Dept)				8367364924
	• Harish (ECE Dept)				8074244734
	• Bhoopathi Patel				9949184086

4. Above details are correct and verified.

1. Snake Robot:-

About Snake Robot:- Robots that aim to reproduce serpentine motion have been a subject of interest among engineers for a very long period of time due to several reasons. Snakes achieve a much higher degree of flexibility and adaptability to their immediate terrain than organisms that use limbs for locomotion while maintaining the same level of efficiency. Thus, building robots that can emulate the gaits displayed by snakes can enable us to access difficult-to-reach areas and harsh terrain with minimal power cost.

This project aims to create a snake robot that emulates a few of the gaits that snakes use, namely lateral undulation and sidewinding locomotion in a modular, compact, low-power, and relatively low-cost manner. As a result, the snake can maneuver over several slippery surfaces through the use of sidewinding locomotion, while maintaining high-speed travel using lateral undulation.

This hybrid of both gaits allows us to combine the best of both worlds, meaning the robot can move at a high speed when using lateral undulation and shift to sidewinding locomotion when difficult terrain has to be navigated. Such a bot has a myriad of applications, including but not limited to search and rescue operations, stealth operations, and wildlife research.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
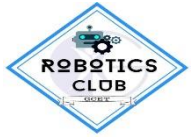### *ROBOTICS LAB.*

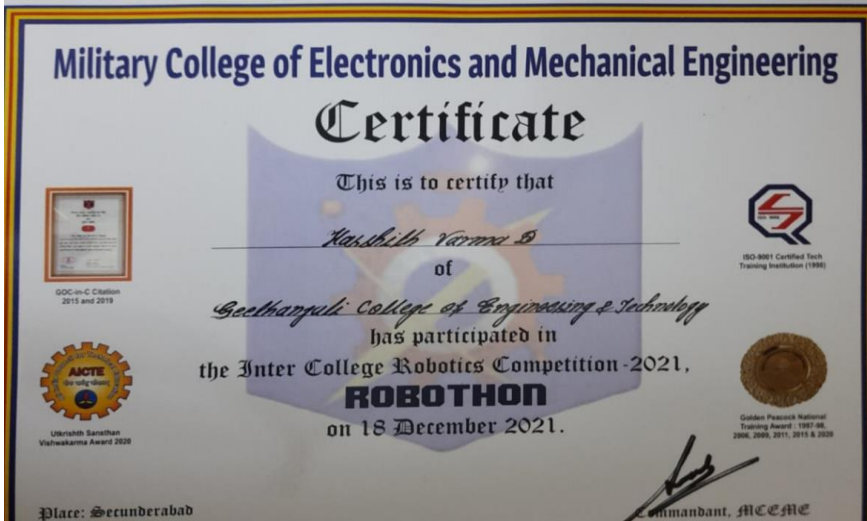**Snake Robot Team Members(Varun, Harsheeth,Abhinav, Suny (left to right)**

Snake Robot Competition Mentor-Praveen

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
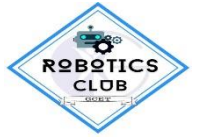## DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Sample Certificates:-

2. **Medical Assistant Drone:-**

About the Drone: - Unmanned aerial vehicles (UAVs) have become increasingly prominent in a variety of aerospace applications. A quadcopter can achieve vertical flight in a stable manner and be used to monitor or collect data in a specific region such as mapping terrains. Technological advances have reduced the cost and increased the performance of the low-power microcontrollers that allowing the general public to develop their own quadcopter.

The goal of Airstriker is to aid the soldiers in times of need, by providing an emergency medical kit that consists of a basic first aid kit and other necessities. It can maneuver without human interference. Apart from this, it is equipped with an advanced night vision camera that enables it to get an aerial view of the location. It also obtains stable flight; gathers and stores images and videos captured by the camera and performs auto commands, such as auto-landing.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
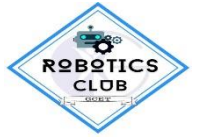## DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Sample Certificate:-

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
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ROBOTICS LAB.

Navarith Pradarshan 2K22:-

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
REPORT ON
Project Exhibition

"Navarith Pradarshan 2K22 – *innovation as an act to exhibit*"

held on 30th March 2022

Department of ECE under CoE ES & IoT conducted Project Exhibition **"Navarith Pradarshan 2K22 – *innovation as an act to exhibit*"** in association with ISTE, IIC, and JHUB on 30th March 2022, for Students of Geethanjali College of Engineering and Technology.

Overall Event Coordinators:

1. K. Somasekhara Rao, Dean of Student Affairs and Professor of ECE Department.
2. Ms. B Sree Latha, Associate Professor, ECE Department.

Robotics Lab Coordinator:-

1. G.Praveen Kumar, Assistant Professor, CSE Department.

Projects are developed under the Smart Bridge Robotics Learning and Development center and some projects are developed by robotics club members for various competitions. For this exhibition, two schools are invited to visit and get explored the technological development of the models. The list of schools visited for the event is:

➔ Pinion High School, Jawaharnagar, Dammaiguda.
➔ Matrusri E&L School, Nallakunta.

Around 300+ School Students and School Teachers have attended the program.

The projects were exhibited at the Department of Computer Science and Engineering
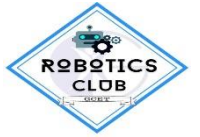
     Robotics LAB:-   **Block-4, Room No 104**

Coordinator   **HoD-CSE**

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(Autonomous)
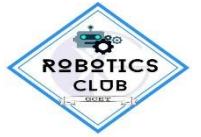## DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Total projects from Robotics Club are exhibited and the list of projects is given below-

S.No.	Project Team No.	Title of the Project	Branch, Year and Section	Location
1	**TROBO**	**TURTLEBOT**	**CSE-II**	**Block-4, Room No 104**
2	**AIRSTRIKER 550-MT**	**Medical Assistant Drown**	**CSE-IV & ECE-III**	**Block-4, Room No 104**
3	**VIPER - 105**	**Snake Robot**	**CSE – II & III**	**Block-4, Room No 104**
4	**Short robot**	**MINI ROBO**	**CSE - II**	**Block-4, Room No 104**
5	**Automatic Light**	**sensor lights for home**	**CSE-IV**	**Block-4, Room No 104**

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Koushik explaining about Mini robot
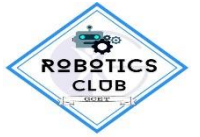

Nandhi shows how Depth sensor cam working

School students at Robotics Club

Abhinav demonstrate about Smart home

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DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Abhi interacting with students

Sunny Raj shows Snake Robot functioning

Event Coordinator   **HoD-CSE**

G.Praveen Kumar   **Dr.A.Sreelakshmi**

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
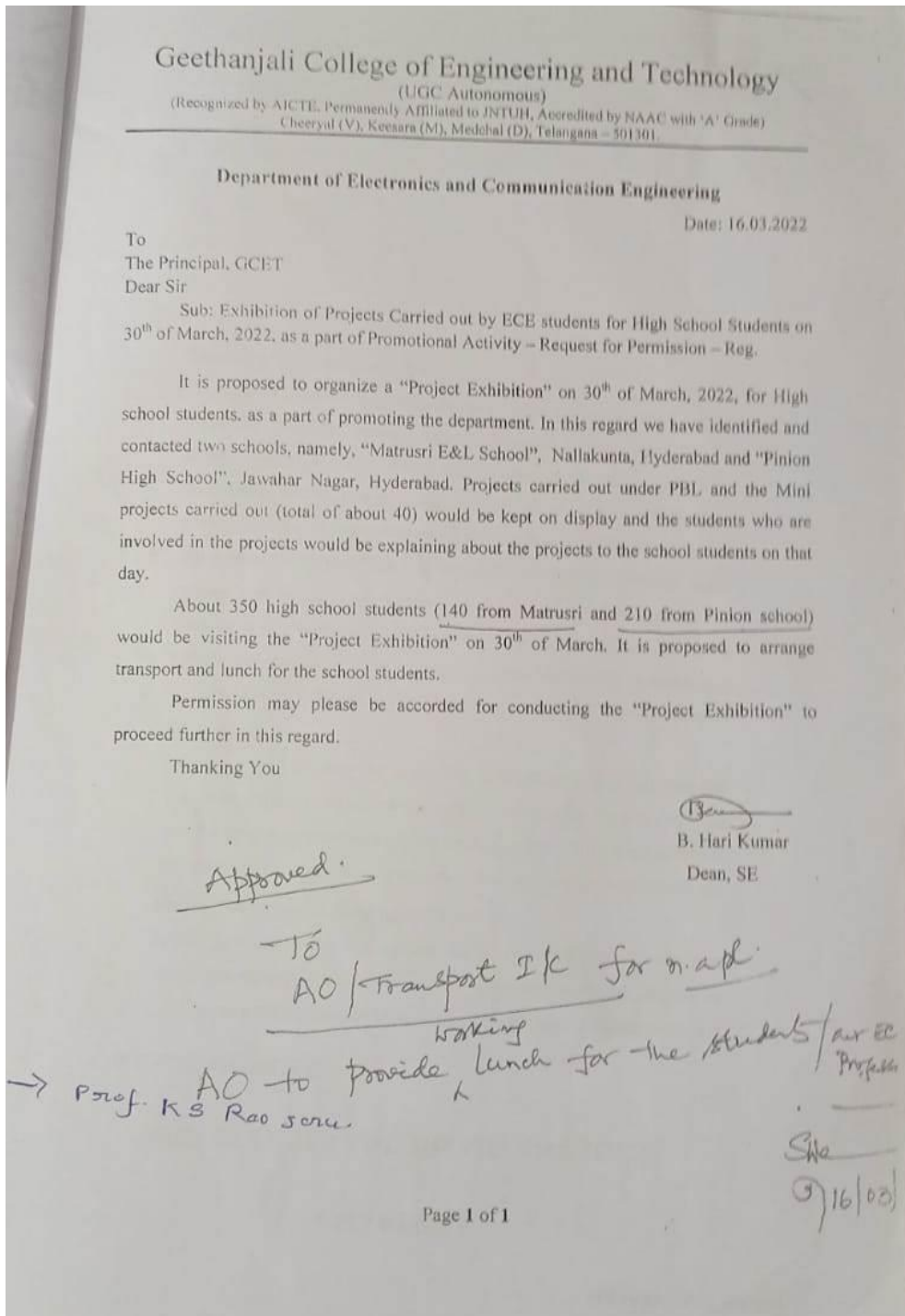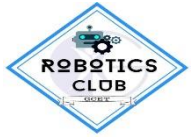### *ROBOTICS LAB.*

Enclosures:

- ANNEXURE-I: Approval Letter from College to conduct the Project Exhibition
- ANNEXURE-II: Invitation Letters sent to Schools and Acceptance of Invitation Letters received from Schools.
- ANNEXURE-III: Permission Mail received from ISTE to conduct the event under ISTE.
- ANNEXURE-IV: Invitation Letter
- ANNEXURE-V: Participation and Appreciation Certificates Template
- ANNEXURE-VI: Student Feedbacks Scanned Copies
- ANNEXURE-VII: Newspaper Cut-out
- ANNEXURE-VIII: Photo Gallery

ANNEXURE-I
Approval Letter from College to conduct the Project Exhibition

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Geethanjali College of Engineering and Technology
(UGC Autonomous)
(Recognized by AICTE, Permanently Affiliated to JNTUH, Accredited by NAAC with 'A' Grade)
Cheeryal (V), Keesara (M), Medchal (D), Telangana – 501301.

Department of Electronics and Communication Engineering

Date: 16.03.2022

To
The Principal, GCET
Dear Sir

Sub: Exhibition of Projects Carried out by ECE students for High School Students on 30th of March, 2022, as a part of Promotional Activity – Request for Permission – Reg.

It is proposed to organize a "Project Exhibition" on 30th of March, 2022, for High school students, as a part of promoting the department. In this regard we have identified and contacted two schools, namely, "Matrusri E&L School", Nallakunta, Hyderabad and "Pinion High School", Jawahar Nagar, Hyderabad. Projects carried out under PBL and the Mini projects carried out (total of about 40) would be kept on display and the students who are involved in the projects would be explaining about the projects to the school students on that day.

About 350 high school students (140 from Matrusri and 210 from Pinion school) would be visiting the "Project Exhibition" on 30th of March. It is proposed to arrange transport and lunch for the school students.

Permission may please be accorded for conducting the "Project Exhibition" to proceed further in this regard.

Thanking You

B. Hari Kumar
Dean, SE

Approved.

To
AO | Transport I/c for n.apl.

AO to provide working lunch for the students / our EC Profess
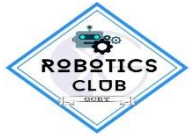
→ Prof. K S Rao scru.

16|03|

Page 1 of 1

ANNEXURE-II
Invitation Letters sent to Schools and Acceptance of Invitation Letters received from Schools.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

I. Invitation Letter sent to Matrusri E&L School, Nallakunta.

Phone : 9182058188
Website: www.geethanjaliinstitutions.com
info@gcet.edu.in

Geethanjali

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AUTONOMOUS
(Accredited by NAAC "A" Grade; ECE, CSE, EEE & ME, B.Tech Programs Accredited by NBA;
Approved by AICTE, New Delhi; Permanently Affiliated to JNTUH)
Sy. No. 33 & 34, Cheeryal (V), Keesara (M), Medchal District. - 501 301.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

To   Date: 21.03.022
Mrs. Lalitha A,
Chairperson,
Matrusri E&L School,
Nallakunta, Hyderabad.

Dear Madam,
Subject: Invitation for "Project Exhibition" on 30th March, 2022 in our department - regarding

To create awareness of applications of electronics in day-to-day life and stimulate innovation in the high school students, a "Project Exhibition" is planned to be organized in our department on 30th March, 2022. Prototypes of several interesting projects executed by our B.Tech (ECE) students would be demonstrated to the school students. Our institution will arrange transport for pickup and drop of your students, if they are accompanied by at least one teacher per bus.

You are cordially invited to take advantage of this initiative and indicate your acceptance of the same at the earliest.

With regards

Prof. B. Hari Kumar

Dean, SE&CE
PROFESSOR
Dept. of Electronics & Communication Engg.
Geethanjali College of Engg. and Tech
Cheeryal (V), Keesara (M), Medchal (D), T.S. 501301

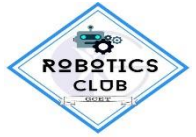Sponsored by **TEJA EDUCATIONAL SOCIETY, HYDERABAD**
Office : Sy. No. 33 & 34, Cheeryal (V), Keesara (M), Medchal Dist. - 501 301.
Phones : 9182058188, 9866308271

II. Acceptance of Invitation Letter received from Matrusri E&L School, Nallakunta.

Matrusri E&L

THE COMPLETE SCHOOL FOR FUTURE ENTREPRENEURS & LEADERS
(Recognized by Govt. of T.S)

23-Mar-2022

To

Prof. B. Hari Kumar,
Dean, SE&CE,
Department of Electronics & Communication Engg.
Geetanjali College of Engg. and Tech
Cheeryal(V), Keesara(M), Medchal District

RE: Acceptance of Invitation for "Project Exhibition" on 30th March 2022

Dear Sir,

We would like to thank you for inviting us. Matrusri E&L School is delighted to receive the invitation and on behalf of the school, we wish to formally accept the invite. The students of Matrusri E&L will be excited to understand and learn from this project exhibition.

We are sure that the objective of creating awareness of practically applying the concepts learnt will sow the seeds of innovative thought process in young minds, which will inspire the students to gain a perspective of applying knowledge acquired through academics.

Thank you for arranging the transport, our students will be accompanied by couple of our staff members in each bus.

We look forward to making this initiative a successful one.

With warm regards

Lalitha A
Chairperson
Matrusri E&L School
Nallakunta, Hyderabad

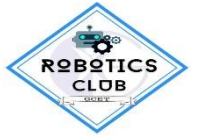#2-1-290/5/1, Street Opp. Bank of Baroda, Nallakunta, Hyderabad - 500 044. | 7331129352 7331129632 | info.eandlschool@gmail.com | www.matrusrischools.in

III. Invitation Letter sent to Pinion High School, Jawahar Nagar.

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Phone : 9182058188
Website : www.geethanjaliinstitutions.com
info@gcet.edu.in

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Sy. No. 33 & 34, Cheeryal (V), Keesara (M), Medchal District. - 501 301.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

To
The Headmaster/Principal,
Pinion High School,
Jawahar Nagar, Balaji Nagar,
Hyderabad - 500087

Date: 22.03.022

Kind Attention: Sri Muralidhar Reddy, Pinion High School.

Dear Sir,

Subject: Invitation for "Project Exhibition" on 30th March, 2022 in our department - regarding

As part of an initiative from Institution Innovation Council (IIC), Ministry of Human Resource and Development (MHRD), Government of India, we are glad to know that our institution was approved as a mentor to groom the students of your school in innovation. To fulfil this responsibility, our faculty members namely Prof.O.V.P.R. Siva Kumar, Dr.S.Vallisree and Mr.K.Satish Babu are identified to interact with you.

In this context, as a first activity, to create awareness of applications of electronics in day-to-day life and stimulate innovation in the high school students, a "Project Exhibition" is planned to be organized in our department on 30th March, 2022. Prototypes of several interesting projects executed by our B.Tech (ECE) students would be demonstrated to the school students. Our institution will arrange transport for pickup and drop of your students, if they are accompanied by at least one teacher per bus.

You are cordially invited to take advantage of this initiative and give acceptance of the same at the earliest. Please indicate the number of students and teachers planned to visit our college.

With regards,

Prof. B. Hari Kumar
Dean, SE&CE
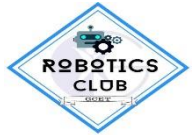
GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

IV.Acceptance of Invitation Letter received from Pinion High School, through phone call.

M Gmail

B.SREELATHA GCET <bsl.ece@gcet.edu.in>

Approval for "Navarith Pradarshan 2k22 - innovation an act to exhibit" Project Expo under ISTE

2 messages

B.SREELATHA <bsl.ece@gcet.edu.in>   Thu, Mar 24, 2022 at 10:54 AM
To: msowjanya.ece@gcet.edu.in, sowjanya.maddireddy@gmail.com, SALAGRAMA SURYANARAYANA GCET
<ssn68.ece@gcet.edu.in>, kumar hari <hari_kumarin@yahoo.com>

Good Morning Madam,

This is regarding the Project Exhibition with Title "Navarith Pradarshan 2k22 - innovation an act to exhibit", which is
organized under CoE ES & IoT. We ould like to conduct this event under ISTE Student Chapter.

For this we need the approval from ISTE Student Chapter GCET.

We request to do the needful.

Event on 30th March 2022.

Thanks and Regards,

Mrs. B.Sreelatha,
Associate Professor,
Electronics and Communication Engineering Department,
Geethanjali College of Engineering and Technology,
Cheeryala(V), Keesara(M), Medchal Dist.
Telangana, INDIA.
Pin Code-501301.

mail ID: bsl.ece@gcet.edu.in
Mobile No: +91 9989432990

Akshara <sowjanya.maddireddy@gmail.com>   Thu, Mar 24, 2022 at 6:12 PM
To: "B.SREELATHA" <bsl.ece@gcet.edu.in>

Dear madam,
we are happy to say that you can conduct this event under the ISTE student chapter.this is actually a good idea and
which help students to showcase their talents Thanks & Regards,
Maddireddy.Sowjanya

[Quoted text hidden]

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
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DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

ANNEXURE-IV
Invitation Letter

Geethanjali College of Engineering and Technology

INVITATION

Dept. of Electronics and Communication Engineering

INVITES YOU FOR

Navarith Pradarshan-2K22

- innovation as an act to exhibit

30 th March 2022

Under CoE ES & IoT,
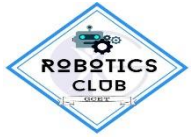in association with ISTE, IIC and
JHUB

ANNEXURE-V
Participation and Appreciation Certificates Template

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

Geethanjali College of Engineering and Technology

(UGC Autonomous, Accredited by NAAC with "A" Grade" & NBA)

(Approved by AICTE and Permanently Affiliated to JNTUH)

Cheeryal (V), Keesara (M), Medchal Dist., 501301

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Navarith Pradarshan 2K22

- innovation as an act to exhibit

Certificate of Appreciation

This is to certify that Mr./Ms. _____ from _____ Year of _____ department has won _____ Prize in "Navarith Pradarshan 2K22 - innovation as an act to exhibit" on 30th March, 2022 organized by the Department of Electronics and Communication Engineering under CoE ES & IoT in association with ISTE Student Chapter, IIC and JHUB at Geethanjali College of Engineering and Technology, Hyderabad.

Mrs. B. Sreelatha
Coordinator

Mrs. M.Sowjanya
ISTE, Coordinator

Prof. K. Somasekhara Rao
Dean, SA

Dr. S. Suryanarayana
HoD, ECE

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
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DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.

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(Approved by AICTE and Permanently Affiliated to JNTUH)
Cheeryal (V), Keesara (M), Medchal Dist., 501301

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Navarith Pradarshan 2K22
- innovation as an act to exhibit

Certificate of Participation

This is to certify that Mr./Ms. _____ from _____ Year of _____ department has participated in *"Navarith Pradarshan 2K22 - innovation as an act to exhibit"* on **30th March, 2022** organized by the Department of Electronics and Communication Engineering under CoE ES & IoT in association with ISTE Student Chapter, IIC and JHUB at **Geethanjali College of Engineering and Technology, Hyderabad.**

Mrs. B. Sreelatha
Coordinator

Mrs. M.Sowjanya
ISTE, Coordinator

Prof. K. Somasekhara Rao
Dean, SA

Dr. S. Suryanarayana
HoD, ECE

GEETHANJALI COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous)
DEPARTMENT OF Computer Science & Engineering
ROBOTICS LAB.
ANNEXURE-VI
Student Feedback Scanned Copies
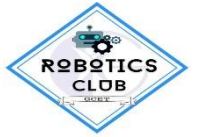
Matrusri E&L School
8th class

Mini Robot:- It's very nice. And its very creative model. 10/10

Snake robot:- Ok! It's nice & nice explaination. 10/7

I Enjoyed a lot by knowing different Engineer brother's projects. I learnt so much from this projects. I can't express it by my words. I like the explanation of the brother. Thankyou

By
S.SRUJAN
9th-B.

Feed back

We are from Jawahar Nagar Pinion High School. I am glad to see these projects all were amazing. They are helpful to us in our daily lifes. As changing the phones and control electric appliances and everything.

My favorite project was Door monitering system, women safety device, using Arduino, smart irrigation system.

I hope I would like to visit this collage again as a student.
Mushan, Shafiya, Divya S

Feedback   (Matrusri E&L) school

→ Very useful models, great ideas through modern technology.

wonderful ideas

గీతాంజలి కాలేజీని సందర్శించిన మాతృశ్రీ విద్యార్థులు

అంబర్‌పేట, వార్త ప్రతినిధి:

న్యూ నల్లకుంట పరిధిలోని మాతృశ్రీ ఉన్నత పాఠశాల విద్యార్థులు ఆధునిక సాంకేతిక విధానాలను తెలుసుకునేందుకు బుధవారం "గీతాంజలి కాలేజ్ ఆఫ్ ఇంజనీరింగ్ అండ్ టెక్నాలజి(%+జఙు%)" కళాశాల క్షేత్ర సందర్శనం చేశారు. గీతాంజలి కాలేజ్ కళాశాల సిబ్బంది, కళాశాల విద్యార్థులు పరిశోధనా అంశాలను గురించి పాఠశాల విద్యార్థులకు విశదీకరించారు. గీతాంజలి కళాశాల విద్యార్థులు పరిశోధనలు చేసిన తీరు పాఠశాల విద్యార్థులను ఎంతగానో ఆకర్షించాయి. పరిశోధనలు ఆయా కేంద్రాల వద్ద పాఠశాల విద్యార్థులకు ప్రత్యక్ష వీక్షణ గావించారు. ఈ కార్యక్రమం ద్వారా పాఠశాల విద్యార్థులకు తమ భవిష్యత్తు అవసరాల దృష్ట్యా పాఠశాల విద్యతో పాటు ఏ విధమైన ఆధునిక సాంకేతిక అంశాలను నేర్చుకోవాలో ఒక అవగాహన ఏర్పడటమే గాక ప్రాక్టికల్ అప్లికేషన్స్ పై పట్టు సాధించేందుకు, విద్యార్థులు స్వతహాగా అవగాహన కలిగి ఉన్నత చదువులలో రాణించేందుకు ఉపయోగపడతాయి. విద్యార్థుల భవిష్యత్తును దృష్టిలో ఉంచుకొని, వారి ఉన్నతమైన ఉజ్వల భవిష్యత్తుకు ఎంతగానో ఉపయోగకరమైనటువంటి ఈ సందర్శనను మాతృశ్రీ పాఠశాల యాజమాన్యం ఏర్పాటు చేశారు. ఈ కార్యక్రమంలో గీతాంజలి కళాశాల అధ్యాపక సిబ్బంది, కళాశాల విద్యార్థులు మాతృశ్రీ పాఠశాల ఉపాధ్యాయ సిబ్బంది, విద్యార్థులు పాల్గొన్నారు.

Newspaper Cut-out