

# **USHARAMA**

**COLLEGE OF ENGINEERING AND TECHNOLOGY**



## **Techno-Travel Diary 2015-19**

"We have stopped optimizing for programmers and started optimizing for users"

Vol-5 issue 1



# THE JOURNEY...





# Vision of Special Team



**Making UshaRama Recognised as  
“House of Robots” with Constructive Grey Masters**



**Muni Mahesh  
Technical Manager**





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2015 TO 2018  
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project videos



Direct Current  
Director

Charged  
Chairman

Under the Hood of HoD's

Phoned  
Principal



AAA  
(Anil Ajay Arun)

THANK YOU HEADS



# About 2014-15

## An Year of Start-UP Engineers



**Highlights : An Algorithm to predict the cricketing score using R-Statistics.**

### **A mining module to online cricket Networking :**

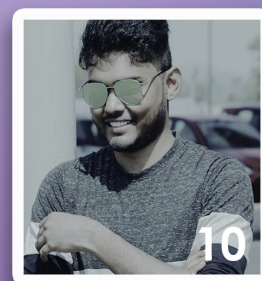
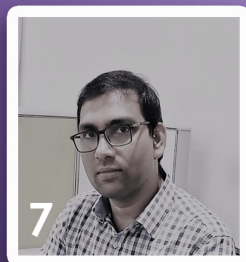
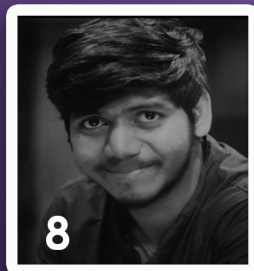
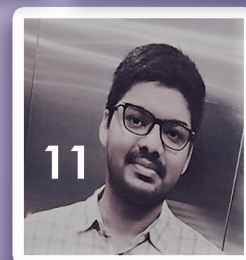
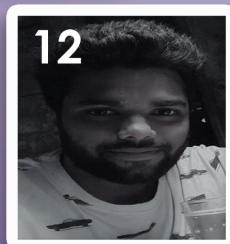
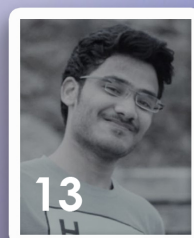
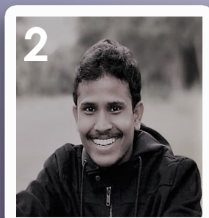
Since cricket is one of the popular games played across the globe, there will be significant challenges for accurate prediction with difficulties like pitch, weather, due etc. This project predicts and declares the natural decision of winning or losing matches using data mining projects. Apart from predictions, the algorithm finds a solution in achieving the target even. This has been even tested in real time scenarios for better outcome.



### **Other projects**

- 1) Social Networking web development using Pyth Django
- 2) Big Data Analysis for Location Based Services
- 3) E-commerce web development using Groovy on Grails
- 4) Design, Predict and Modulate for Live Cricket matches
- 5) Selenium testing for Multiple Web Development Projects
- 6) Private cloud setup for Internal Usages





- 1) "An energetic place where enthusiasm and smart work is always appreciated and encouraged"  
Durga Rishitha-GIS at accenture
- 2) "Attaining the highest targets in shortest period of time it's specialty"  
Naveen-Testing at Virtusa
- 3) "Four years of engineering put into practicality at the most creative and innovative laboratory"  
Girish-Jr.Data scientist at Motivity Labs
- 4) "Whatever kind of seed is sown in here, prepared in due season makes our lives"  
VANAJA-ML & spark trinee at Aadhya Analytics
- 5) "SP Team teaches you success consists of going from failure to failure with out loss of enthusiasm"  
Suvaina-Node Js developer at accenture
- 6) "mahesh sir, you are the semicolon to my statements"  
VISWA-Angular JS Developer at BWDC
- 7) "From EEE department to Microsoft, thanks to sp"  
LAKSHMAN-AZURE Engieer & ML Engineer at Techminds / Microsoft/BWDC
- 8) "Choice of selecting hadoop lead my life from SP Team to poland "  
Ajmal-I-Big Data developer at Kogenfix, Neilsen
- 9) "Not just setting up a goal but the various path for implementing it is acquired here"  
Kiriti-Mongoddb DBA at Micro Clouds / Aadhya Analytics
- 10) " Life doesn't get better by chance, but by change"  
Sameer-Hadoop Developer at Aadhya Analytics
- 11) "The Never give up attitude and passion towards work is what keeps us as techies thrive towards achievements"  
Mukesh-Data Engineer End Lead at XDD
- 12) "He is not the one who holds the torch. he is our torch"  
Dileep-Hadoop Developer at Aadhya Analytics
- 13) "Special Team: Place where you can do things insanely great, with add-on fun and knowledge"  
Phani atluri -Data Engineer and MS at XDD and Cones Toga college,CANADA

2015



# ABOUT 2016 SPEC OS

Highlights: A project of Special Team OS

Information Technology acquired the global market and need more customizations for better performance and throughout. The underlying of all software's is based on the Operating System. So this project includes an OS design for our college (usharama) usage by following the set of methodologies for specific set of applications. This results in quick processing of applications as per the priority.

Requirements:

Kubuntu, Debian, Remastersys.



- 1) A Customized Real Time Operating System for Institutional usage
- 2) Local Search Engine for Operating systems
- 3) Consultancy Project for Admissions e-bill generation
- 4) Consultancy project for automatic pay-slip generator
- 5) Open Hand Mouse Mover using Python
- 6) Satellite movement using PLC and SCADA
- 7) Geo-location tagger offline by developing the application on cross-platform
- 8) Content Digitalization : Download CV data automatically from LinkedIn
- 9) Cross platform development for language translator
- 10) Dynamic Routing for dispatch tracking based on AI
- 11) Vehicle counting & Tracking using Open-CV
- 12) License plate Detection using Open-CV



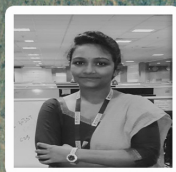


"Special Team is the Multi disciplinary platform of practical orientation to explore your hidden talents"  
Azeez Patan-SCADA Engineer at Indiaplast.

"A successful team is a group of many hands and one mind, that happens only Special Team"..  
Sandeep Godavarthi-IT Consultant at Brocade Network

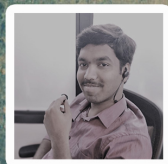


"Hands on experience in solving and exposure to problem solving of real world complexities is a whole lot of fun learning new things everyday"..  
Jaya Krishna-Java / web Developer at TCS



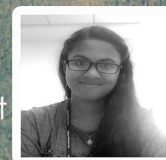
"Putting the theoretical concepts into practicality is the special trait taught here! "  
Pragna- Associate Business Dev at Trajectus

"You find the courage to Rise and fight back for yourself both technically and personally"  
Aishwarya- Associate Consultant at Syntel



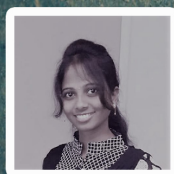
"One can witness the life of a real corporate person with a flexible working environment"--  
Teja KNV- Big Data Engineer Nielsen India

"A platform of Infotainment where information is provided in a more effective manner"..  
YASASWINI- Sr. System Engineer at Cognizant

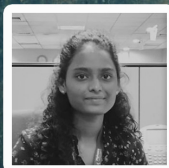


"I have been technically overridden"  
RABBANI -Business Associate at Accenture

"Only place of journey start with core basics to corporate logics. "  
SHARIEF- Automation Testing at HCL



"Gives a better opportunity to learn technologies and provides hands on experience that prove worthy in corporate culture"  
DEEPTHI- Business Analyst at HCL



"I had an idea where SP filled it "  
Pavan Open-CV / Jr. Data Scientist at Accenture &Tetherbox  
"Special team is a brand that connects people emotionally"  
Padmavani-SAP Associate S/W at Mphasis



"Credits to usha rama for establishing this environment at student level"  
Shanthini- Java / Web Developer at TCS.



# About 2017

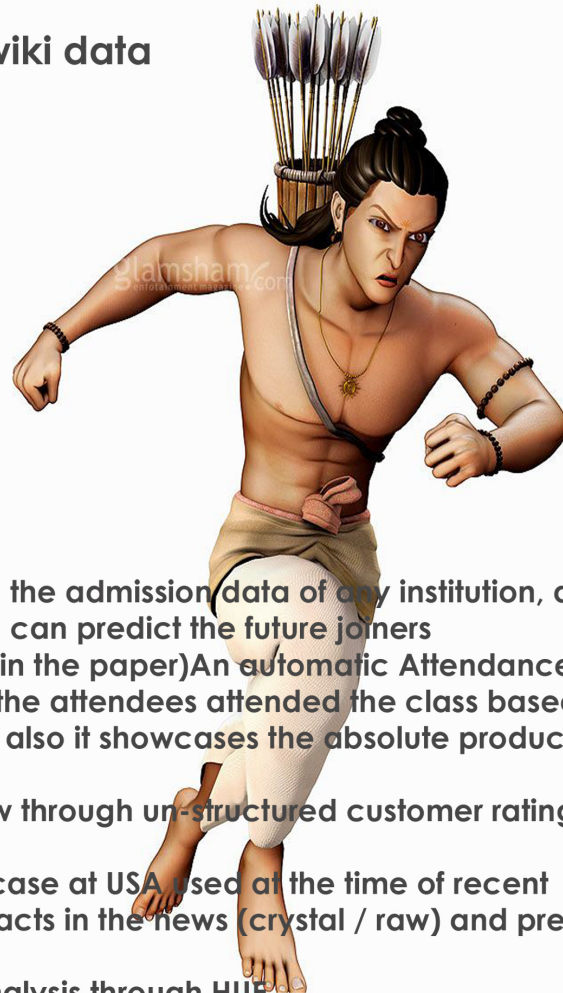
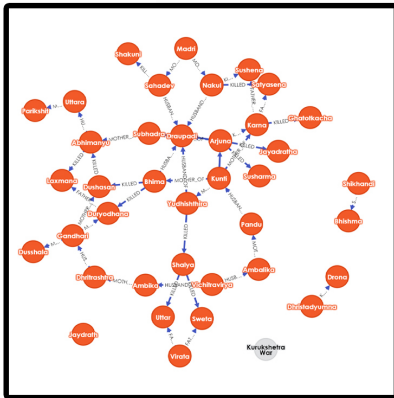
## DESIGN AND DEVELOPMENT OF RAMAYAN

A graphical Project of explaining the greatest Indian Epic “Ramayan”

This project is a new era of describing Ramayan using neo 4g and wiki data. They have taken the wiki data and parsed it with python that is integrated with neo 4g. This is a graph which can show any type of relation like father of, mother of, enemy of etc. And can also show who has killed whom.

**Requirements:**

Neo 4g, python language, wiki data



- 1) Admission predictor - By analyzing the admission data of any institution, a custom modern data science formula can predict the future joiners
- 2) Automatic Attendance (Published in the paper)An automatic Attendance Android App can fill the excel as per the attendees attended the class based on MAC address of every device and also it showcases the absolute productivity based on time spent
- 3) Customer Analysis – Product Review through un-structured customer rating data using Hadoop
- 4) Fake calculator – A real time use-case at USA used at the time of recent presidential elections. Analyzing the facts in the news (crystal / raw) and predicting the failure rate in the data
- 5) SOLR indexing on yelp data and analysis through HUE
- 6) Custom university ranking using Pentaho Analytics based on users requirement (MS Related projects )
- 7) Making the Legacy Technologies (mysql) faster using Spark
- 8) Twitter Analysis – A live data is taken from twitter based on the requisition and analyze through word cloud or histogram report





"It is the complete definition of successful achievement through the untrodden paths by shedding the blood and tears of the people out there"..

D. Chandrahas- Hadoop Developer at  
GSPANN Technologies

"Special team brings you feel of how cool being a techie can be"..

Chand Basha- Data Analyst at Efftronics



"My picture on the walls of SP says everything about my passion towards it"  
Kiran Aaradhya- CEO at Studio 3, International grappling champion.





# About 2018

## An year of Robotics

**Serving bot:** Serving Bot is a project made on low cost by attaching the pvc pipes and usage of Raspberry pi kit and motors which is overall controlled by an Android application to serve the specified user



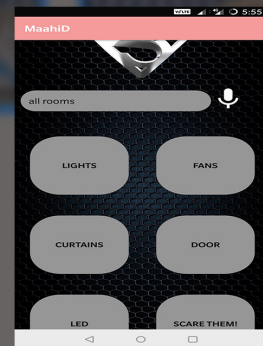
### Harathi bot:

Harathi Bot is designed using a Raspberry pi kit and two motors in which one is used to operate the bell and the other is used to rotate the Harathi stand by syncing the holy songs along..



### Home Automation:

Home Automation like fans, lights and curtains can be controlled with an Android app with relay drivers connected to a Raspberry pi kit



### Other Project List:

- 1) Painting Using Java
- 2) IoT Smart Mirror telecasts miscellanies apps
- 3) IoT Coffee Machine controlled by Analog Clock
- 4) Hydraulic Fuel
- 5) Gaming using Face Recognition
- 6) Selfie-Attendance
- 7) Door Unlock System using IOT



"It's a place about working together, managing together and developing from discussions"

Gayatri- Interior designer at Trendz Infratech



"life takes you to unexpected places but sp brings to you lead a successful life" --

Guna- Angular JS developer at Ancons

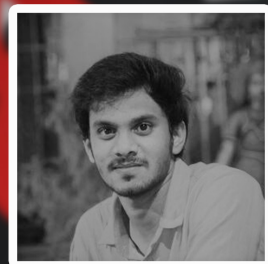


"I have played my first game which i had developed"

Datta- Game Developer at JumpStart

"Get yourself exposed to successful S(p)MILE"

Mouli- System Engineer at Wipro



"You Find the courage to RISE/fight back for yourself"

Ramya- Trainee at Google Pay



If one experiences sp's workflow then he can make himself habituated in professional life too..!!

Shahid- Python Developer at Quantela Labs



S.P is an emotion, which taught me the real me....

Deepika- Associate Engineer at IBM



"We (special team) are made to put our individual wants for collective work"

Lakshmi- System Engineer at Technoids



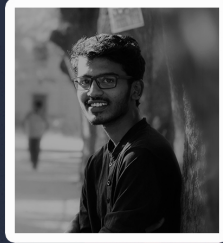
we develop same mental ability to get back up mentally when knocked out"

Lakshmi Priya- Java Networking at Tech. Mahindra



"its a lesson of balancing both personal and professional lives"

Praseedh- Cloud Engineer at PragmaEdge



"I have learnt everything and would love to stay and spend all the time in that room"

Anvitha- HR at Likha Business Solutions



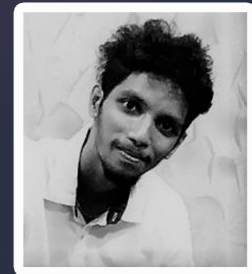
Place to find our inner talent.

Lokesh- Associate at Cognizant



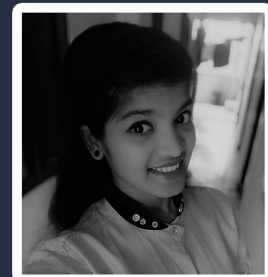
"The place where everyone gets opportunity to shine"

uttej- System Engineer at Infosys



Noteworthy squad which will provide experience = corporate life, hence can easily succeed in real life

priya praneetha- System Engineer at Wipro





"a team is not a group of people who work together, but to trust each other"

Vasanthi- MBA at Xavier



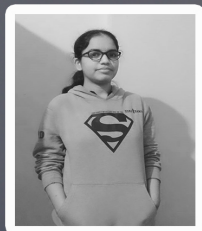
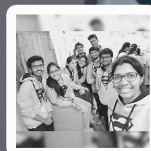
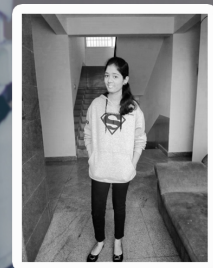
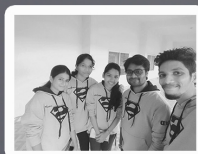
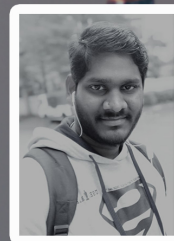
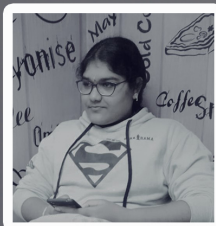
"My life of fighting between Govt. job and Hadoop job. Hadoop wins the race due to SP"

Seenu- Hadoop Developer at Aadhya Analytics



"Each one of us make a difference, but together in sp we can make a change"

Manoj- MEAN STACK Developer at WOP



#HoodieMania



# An Era of Magic Tree:2019

## PUNCHING BAG:

An innovative way to water the plants which can also be exercise for the human body.

This project is done by the composition of ECE & EEE students. When a person punches the bag, automatically plants get watered.

The punching bag is equipped with husk and a gyroscopic sensor. That notes the readings depending on the intensity of the punch and will be sent to raspberry pi. Raspberry pi controls the motor and the plants are watered. The moisture sensor detects the water level. If the water level is insufficient, water will be passed through pipes. If sufficient, the program is being stopped from running.

Tools used: PVC pipes & fittings, plants with pots, raspberry pi, punching bag, rice husk, gyroscopic & moisture sensors, connecting wires, 12v DC motor & adaptor, node MCU(ESP8266), uninterrupted power supply and a water tin.



## MAGIC TREE:

This is completely made by our students itself. This is an amalgamation of EEE, CIVIL, CSE and ECE branch project. It can see, listen and talk.

Similar to Google assistant, one can have a small talk with it & ask for the weather report; setting reminders etc. this can also detects the objects. For e.g.: when someone is using an object specified to it for so long, it asks the person that what is he doing with that.

This also has a feature of video recognition. With that feature, it can ask random questions to the person who's in front of it. In addition to that, it can detect the emotions and can have a cross-talk with it.

Tools used:

Camera, mike, focus lights, processor and speakers. Iron pipes, mesh & rods, fevicol, News papers, card board, artificial leaves & grass, strip LEDs, flash lights, fiber material, wooden plank



**#Makers from Multiple dept (EEE,CIVIL,CS,IT,EC):-**

**Meghana,Vasanthi,Akash, Eswar , Kowshik, Sai Ram,Krishna,Divya,Pavani,Kundan, Munesh,Mukesh,Subodh,Meher,Chanakya,Saran,Nagini.**



# About 2019

## CAMERA MOVER:



This project is made by ECE, Mechanical and CSE students.

To video shoot any occasion, we need man power to handle it. This is a replacement to the human. With just few instructions, we can video cover the events. In this project, a moving bot will be fixed with a camera backwards. We need to take a photograph of the person we want to video shoot. According to the directions of the person using screen co-ordinates, it also moves accordingly.

In case of emergency, there is even a remote to control the bot

Tools used: 12v DC motor, ultrasonic sensors, voltage regulators, logitech camera, servo motors, raspberry pi, connecting wires, wheels, wood, plastic glass, covering sheets, python & open cv.



## SCOUT BOT:

A salute to the flag is a salute to the soldiers.

This bot is made by a fusion of Mechanical, ECE and CSE students. Since a professional salute can't be done by everyone, this bot is made that way. When it is switched on, it march fasts with the pre defined music. When reached to the destination, it salutes. With the help of an android control, the direction of the bot can be authorized by the user.

Tools used: 8-12v Johnson motors, 2 servo motors, 2-12v battery, 4-L298N drivers, 12v DC fan, speaker, raspberry pi, caster wheels, connecting wires

### # Makers:

Sandeep, Ganesh, Sai Ganesh, Jyothi, Prasanth, Bhushanam, Chanakya, Saran, Harsha, Sri Ram, Veera Sekhar, Divya, Narendra, Jagadeesh, Kavya



# Priest Bot:

This project is a blend of Mechanical, ECE and CSE students. In olden days, we used to have priest for worshipping the god on behalf of a common man. This bot is a replica of priest.

When you provide supply to the bot, 6 columns will be displayed namely: name, gotram, skip, rotate and remaining for mantras. With the help of keyboard, one can enter their name and gotram in the provided boxes and select the matras.

The bot starts harathi along with matras including the name and gotram in it. After the completion of mantras, the bot turns 180 degrees around for the people to take harathi. Once it's done, we have to select rotate button for the bot to turn back towards the god.

Tools used: 4-12v Johnson motors, drivers, raspberry pi & display, speaker, keyboard, adaptor, harathi plate & bell, 4 wheels, iron pipes, bearings, 2-(12v, 2A) power supply, connecting wires.



# Welcome Bot :

This bot is made by ECE, Mechanical and IT students

Generally when we went to any new place, there will be either man power or direction boards to instruct us. In substitution to both of those, a line follower bot will help people to reach their destination in new places.

This bot using ultrasonic sensors, detects the person. When they come near to it for help, they need to enter their name, mobile number and destination path. Then it shakes hands with the person by reading their name. The inbuilt printer generates an ID pass with UR logo and their details. Using line follower sensor, it takes the person to their destination and comes back to its place.

Tools used: raspberry pi, LCD screen, iron,

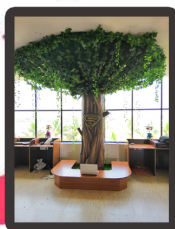
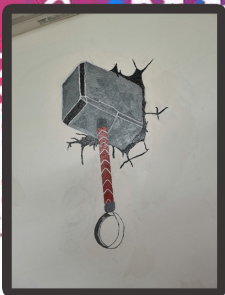
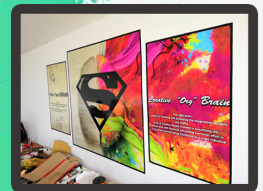
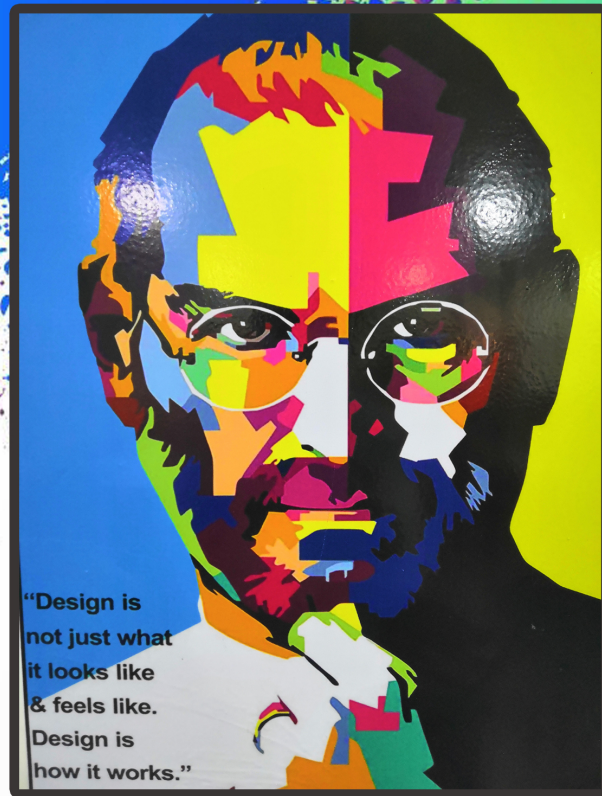
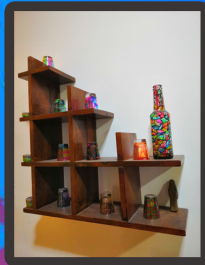
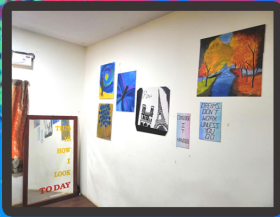
**#Makers:**

**Surya, Chanakya, Ganesh, Abhinav, Jagadeesh, Bhushanam Bhargav.**





# AMBIENCE





# INTERESTING FACTS

## 2015:

1. Special Team has only two months of time in that year where students has worked for more than 12hours
2. 40% of students got job in Hadoop & data engineering
3. 2 students of them are settled as Data Scientists
4. Convocation is the most fascinating day for special students

## 2016:

5. A batch of consultants  
Computer engineering has handled by 4 students  
Electronics has handled by 2 students  
Electrical handled by 1 and Organizing by 2
6. Almost 5 students are pre-interns at Cenele research
7. 4 projects has been deployed for in-house usage like pay slip generator, exam cell & admission generator

## 2017:

8. A Special Room has been granted for Special Team.
9. The whole room design is done completely by students.

## 2018 :

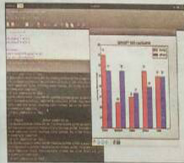
10. A huge campus funding has been started this year.
11. A new era of magazine like flipping book has been designed.
12. Robotics and gaming has been started.
13. A new dressing style like hoodies been wore.
14. Mechanical and civil departments have been joined in addition.
17. Almost 10+ innovative projects has been done.

## 2019 :

18. Official logo has been approved for special team.
19. An other room has been added.
20. All the departments has been worked collaboratively for a project called MAGIC TREE.
21. 80% of projects are on robotics.
22. Entered into a new era of describing – Animation videos.



విజయం ముందుగానే అంచనా □ ప్రాజెక్టు చేసిన ఇంజనీరింగ్ విద్యార్థులు

[illegible]

ఎన్నికలలో విజేతను విశేషిస్తున్న సమాచారం..

ప్రాజెక్టును పను విద్యార్థులు అమెరికా వ్యవసాయ సముదాయ విభాగము వినియోగించారు. అప్పుడు సమాచారం మేముకు దొరుకు తప్పుడు కావాలి? గెలుపొందు ప్రాజెక్టు ద్వారా వీటిని తరలించి డైరెక్టుగా అందజేయడంపై తలచారు. వీటిని తిరిగి కాపాడాలి అందుచే అమెరికాలో, ప్రాజెక్టుకు మరిన్ని హంగులు చేసి, కొత్తగా, మినాళంగా ముందున్న విజ్ఞాన పచ్చగా వీటిని... పచ్చటి వ్యవసాయాన్ని ప్రజలకు అందుబాటులోకి తెచ్చేటందుకు ప్రయత్నించారు.

- కామరూప, మృగసింహుడు



అందుకు అనుగుణంగా ప్రజలకు అందేలా పనిచేసేందుకు ప్రభుత్వం ప్రయత్నిస్తోంది. ఇలాంటి సందర్భాలలో ప్రజలకు అందేలా పనిచేసేందుకు ప్రభుత్వం ప్రయత్నిస్తోంది. ఇలాంటి సందర్భాలలో ప్రజలకు అందేలా పనిచేసేందుకు ప్రభుత్వం ప్రయత్నిస్తోంది.

[illegible][illegible][illegible]



# Journey Of Sp Graynions Workspace photos

2015



2016



2017



2018



2019





# Torchbearer(SP)



## Serving Bot:-

**Bhanu:-** The project in which I've given the pvc pipe connection to the bot..  
**Dileep:-** Yeah but don't forget that I've given the Free Android App to it..  
**Bhanu:-** Well.. the media has made us famous though.. (Links...)



## Automation, IoT:-

**Dileep:-** I've made the Lights and Fans run on an Application  
**Bhanu:-** And I've fulfilled that Automation by including the curtains too..  
**Dileep:-** But Later I've included the S logo led in it  
**Bhanu:-** I've made it glow



## Harathi Bot:-

**Bhanu:-** I've designed the bot  
**Dileep:-** I've written the code for the bot to function  
**Bhanu:-** It was the most highlighted one right..?  
**Dileep:-** Yeah, that's the reason our juniors have upgraded it to 2.0









# The Miles We have travelled







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