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GRIET e MAGAZINE

Freedom lies in Being Bold





There's a famous saying in Sanskrit that "काव्यशास्त्र विनोदेन कालो गच्छति धीमताम" meaning "Wise men would spend their time in learning poetry, music, learning culture/science or language". For this auspicious purpose on the very special "Independence Month", we the editors and pursuers of true news & talents, are serving as both the moderators and advocates of our beautiful Indian culture. "Freedom Lies in Being Bold" is the theme for this month as India successfully celebrated its 73rd Independence Day on Aug 15th. We celebrate the freedom of being bold to achieve what's ours, what we deserve what is our basic right.

As we take liberty in expressing ourselves, to report what we've seen & to describe what we've observed through this unique platform. To provide a platform to budding talents in a small yet powerful space i.e. our college GRIET, via news coverage. This is real freedom for us the, publishers, as well as liberty for you, the readers, to come up and express your thoughts.

Let "एकं सद्विष्रा बहुधा वदन्ति" (Truth is one, wise people call it many) and "सत्यमेव जयते" (Truth alone triumphs) serve as your mottos to deliver the best to the nation & eventually the universe.
Jai Hind!!

Let us know @grietmagazine@gmail.com on we can deliver on forthcoming issues.





MEHER MOHSAIN SHREYA AKASH TEJAS

TAPASYA LASYA SREEJA VANDANA

NIKHILA A. SAI KRISHNA ADITYA M. SAI KRISHNA HITESH



HARITAHARAM

Haritha Haram is a large-scale tree-planting program implemented by the Government of Telangana to increase the amount of tree cover in the state from 24% to 33%.

On 15th August, the Principal, Director and CAO along with faculty from CSE Department planted 200-300 plants near 4th block of the campus







On 17th August, the Commissioner of GHMC M.Dana Kishore, IAS visited college as the chief guest of the programme, Nearly 200 plants were planted on that day by the students. This event was conducted by the Green Campus Student Body under the supervision of Co-ordinator of Green Campus and Dr.Padma from ECE Department.









On 22st August, 100 plants were planted by the first-year student near 3rd Block of the Campus.

On 31st August, The students of Green Campus collaborate with INF, an NGO of Hyderabad and distributed 25,000 plants to Ganges Valley High School and all nearby School and Colleges.









AAC GRIET CONCLAVE

AC GRIET has organized an Engineers Conclave on 17th August

2019 from 1pm to 4pm on the domain Data Analytics. An industrial expert, Mr. Sathish Yellanki who is having 20+ years of I.T. exposure in various areas of Computer Science Industry was invited as the Guest to address the gathering.

Dr. Jandhyala Narayana Murthy (Director of GRIET), Dr.J. Praveen (Principal of GRIET), Dr. RamaMurthy Suri (Associate Dean of AAC) were invited to the conclave to be a part of this discussion forum .





The main agenda of the conclave was to absorb real time projects from the industrial expert for the students to work upon and to grasp insights from his speech .

Faculty mentors like Dr.Y.Nagendra Reddy , Dr.G.Mallikarjuna Rao , Dr. Indira , Mr.G.Pradeep Reddy also interacted with the Guest and shared their valuable ideas and insights on development of an industry expected , real time data science product .

AAC students who have ethical knowledge on data science were selectively chosen to be a part of the conclave namely Saif , Vishnu , Lokesh Konjeti , Lokesh Kamineni , Sahiti Cheguru , Sriram Naidu and Jeetesh .



Sir M.G.Sekharam motivated the students to make the best use of every hand-on-experience in the lab and advised the mentors of AAC to turn the classroom environment into a Laboratory experience of learning.

Principal Sir urged students to dare to dream beyond the mediocre. He made them realize that some are accidental inventions and others which are planned, focused and persistently followed.

Dr. D.Indira said, "It's a very proud moment for AAC to own a lab in the college premises to carry out research. Students are the resource persons of this lab where they can discover themselves, innovate, execute their new ideas and work on their creativity. I urge students to make best use of this lab and I wish all the success for their future endeavors."

Mr. G. Pradeep Reddy congratulated the AAC committee for setting up a lab to produce well-equipped graduates that meet the varying demands of the industries. He also felt Conclaves ensure to expose students to the real-world and provide practical experience while learning.





X-Kernel is a Techincal Event which was conducted by CSE department on 17th August 2019 saw a staggering 925 participants who were mentored, monitored and coordinated by 8 faculty members. The event consisted of a pool of creative technical events specifically tailor-made to inculcate a coding culture. The main aim was to improve & enhance the coding as well as problem-solving skills in the students. Mrs Padma Vijetha stood as the main coordinator for this successful event.



X- kernel is a Technical Event which was conducted by ECE department on 17th August 2019 consisted of a Technical Quiz to just enhance the knowledge of the students in their respective streams. This event was a success with 108 participants from all departments And perfectly supervised by Y. Priyanka, Asst.Prof, ECE department as the main coordinator.

X-Kernel is a Technical Event which was conducted by EEE department on 17th August'19 gives an opportunity to explore the technical competencies among the students 11 events were conducted by the students in the application areas of maths, interpretation and analysing of data, electrical machines and so on. Many participated with enthusiasm under the guidance of Mr.R.Anil Kumar and Mr.Shashank from EEE department.



IT X-Kernel, the IT rendition of the popular x-Kernel series, is a Technical Event conducted by IT department on 17th August 2019. The event, built on the core idea of Cocurricular activities enjoyed a successful turnover with 271 students turning up to participate. Mainly to indulge students in design thinking exercises using various software skills, this event bridged the gap between companies and students to clear out the technical competencies. With the end line of reaching as many students as possible who came out with actual industry knowledge, the IT department did their job neatly and precisely.



X-Kernel is a Technical Event which was conducted by the Mechanical department on 17th August'19 conducted a Technical competition in order to explore the technical competencies among the students by giving Design Exercises using AutoCAD Software. Many participated with enthusiasm under the guidance of L.Gopinath, Asst Prof and B.Shankara Chary, Asst Prof from Mechanical department

ORIENTATION ON FREE SOFTWARE

A session on

"Orientation on Free Software " was conducted on 17 th August 2019 in IT Department from 10:30 am to 1:30pm. The session was attended by students from various departments within the college moreover students were enthusiastic and eager to learn more. The objective and orientation was to introduce Free and Open Source Software.





The session highlighted the disadvantages on Proprietary Software ,their access restriction, number of user permissions , limitations of the software versions, acces s to new versions of the software and huge price involved procuring the software and advantages of Free software Movement ,its basis and advantages of access to software licensed under FOSS.

The seminar was headed by Dr.Y.Sri Lalitha and a group of 4 faculty members –V.Srinivas, P.Prashanth Kumar,N.Srinivasa Rao, R.Arun Kumar who motivated the students and encouraged them to think a step higher and moreover emphasised the need to learn more about free softwares and their applications.

The resource person for the session ,B.Srikanth Reddy , Support administrator from amazon and volunteer of swecha organization. Swecha is a vibrant community of free software users ,students, academicians and software professionals to provide quality software built on the guidelines of free software development model moreover it aims at providing global software solutions to local people .

It was completely an interactive session with a total of 52 students enthusiastic participation . The students feel that many sessions as such must be conducted in the future so that they can have real hands on application too. At the end of the session a call to GRIET-GLUG(GNU/LINUX User Group) formation is initiated. around 20 students of different departments are willing to form a group at GRIET who initiates to conduct workshops, hackathons etc in consultation with FREE SOFTWARE(FSW) branch coordinators .





Event-1: Visiting NIRMAN Association of Handicap

The students of NSS-GRIET from ECE department visited NIRMAN Association for the Handicap, Madhapur on the occasion of 73rd Independence day, where students celebrated their Independence day by engaging themselves with intellectually disabled people of the Association.

They distributed essentials like Tube lights, wash taps for the Association along with some biscuit packets for the people of the house, they also engaged themselves by playing some fun games with the people of the Association.



Event 2:-Visiting MNJ Cancer Hospital

The students from NSS-GRIET Student Body Visited MNJ Cancer Hospital, Lakdikapool on 15th August to celebrate the 73rd Independence Day with the children of the hospital.

A total of 10 students from Civil, Mechanical and EEE department visited MNJ Cancer Hospital and spent some quality time with children of the hospital

They distributed some drawing paper and crayons to the children. They also provided some indoor board games like ludo, snake & ladder and chess.



Event 3:-A Skill Development Programme

Skill Development Programme was organized for the primary school students of Sri Sairam High School by the NSS-IT on 14th August. The Activities were carried out by NSS wing of the IT Department.

As a part of the Welfare, the NSS conducted competitions like Elocution, Essay writings, Fancy dress and Singing to encourage the talents in the students. Later, the students were given Prizes and Appreciation Certificates.



Event-4:- Visiting ASHREYA OLDAGE HOME

The NSS-GRIET wing of CSE department visited ASHREYA OLDAGE HOME on the occasion of 73rd Independence day, where students celebrated their Independence day by spending some valuable time with them.



They distributed groceries and provisions for the Old Age Home along with some sarees for the women of the house, they engaged themselves by emotional interaction with the people of the old age home.





GETTING TO KNOW -HINDUSTAN COCA -COLA BEVERAGES PVT LTD

The Dept of Mechanical Engineering had conducted an industry visit to the CocaCola factory on 5th August. The main motive was to understand how well the activities were handled and organised. The students shared their great experiences on this visit which is listed below:

- As there was a guide who gave us a tour of the factory,it was very systematic and informative.
- The instructions given were very helpful throughout.
- We were excited when we saw how the bottles were made in a perfect shape and size by blowing hot air into them.
- Bottles were well cleansed with hot water which reflects the hygiene they follow.
- We heard that different aerated drinks have different concentrations of soda, but, this
 was actually true. We wouldn't have known this if we hadn \$\pmu\$#39;t come to this visit.

- The guide helped us with the preparation process and the production of cool drinks in prior to the visit.
- We couldn't have a complete view of the working as there was some inspection and no production work was running.
- The visit inspired us to think out of the box and implement ideas that run with less cost without compromise on its effectiveness.

The students offered their gratitude towards their faculty to having given them exposure to the equipment in the factory .Also this motivated them to do their best in the near future



OUTREACH PROGRAM

Outreach program has been organised by the department of EEE. As a part of this program, the team headed by Mrs. Sri Vidya Devi mam and Mrs. Rekha mam along with 11 students have visited ZPHS Bachupally on 21st August, 2019 and taught 8th class students.

Starting from the fundamentals of electricity they are taught how it is generated, technological advancements as well disadvantages of technology. Some interesting facts and science in space and career guidance was also given to the students. Basics about software, programming and Ardunio are also taught to the students. They shown how basic programming is done and few demos where given using Arduino.

The students were very interactive when they were shown the demos of basic projects like Clap switch, house automation using Google home, Windmill prototype and many more. The ideas and working of demos have indulged tones of interest which was reflected in the response towards the program.

A small initiative in making the children aware of this concrete and an effort to help them come out with flying colours has been accomplished. Appreciations and gratitude from students as well the principal gave immense pleasure.



ROAD SAFETY AUDIT

Road Safety Audit for Improvement of Traffic Safety



The ' IEI ' Professional and Institutional Body of our college conduct-

ed a seminar on Road Safety for improving the Traffic Safety. The seminar was honoured by Er Vemula Prashant Reddy, Horn'ble Minister Transport, R&B; B.Shri Sunil Sharma, IAS; Dr B Janardhan Reddy, IAS; Shri T Krishna Prasad, IPS; Er I Ganapathi Reddy, FIE; Er P Ravinder Rao, FIE.

16 undergraduate students attended the event and they were motivated to improve road safety after knowing the disastrous effects which came along with unhealthy road practices.

The seminar was co-ordinated by Mrs I.Chandana, Assistant Professor, Advisor IEI, Civil Department.

The chief guest hon'ble minister of Transport, Roads and Buildings Er VEMULA PRASHANT REDDY lightened the lamp and gave a speech regarding the topic which covered the major and interesting facts, like 5E's (Education, Enforcement, Engineering, Emergency responce and Environment), significance figures on road accidents and deaths caused by different reasons like drivers, road conditions etc, and he reminded duties of the citizens as well as engineers. After the chief guest, Chairman of IEI Telangana, Dr G. Rameshwar Rao spoke about the road safety committee, reasons for accidents. He said that most of the accidents are due to unlawfulspeeds. He said that in other countries the design of roads are basedon mobility principle but in India we follows the accessibility principle which is a major drawback. Then he said about road safety audit and he concluded by giving thank notes to every one.

They highlighted the need Apply Knowledge of mathematics science and fundamentals of civil engineering and Design the system component, or process to meet desired needs in civil Engineering within realistic constraints moreover Understand the impact of engineering solutions in a global, economic and societal context. The need for Engineering solutions on environment and to demonstrate the need for sustainable development. Overall the seminar was highly motivating the students the need to come with sustainable ideas and work with it for a safer Globe.



BUDDYING RJ's BATCH 4

The Radio Jockey course is one of the unique courses offered by our college. In this, the Pragnya Radio Station 90.4 Committee every 3 months inducts 12-14 students for the training program. Over the course of weeks, they're trained in voice modulation and are helped in overcoming the fear of talking on the mike and also in daily life in general.

The course, in brief, begins after a check of your voice modulation; ie, done by a reading an article or para from an extract. This is further fine-tuned by voice modulation exercises guided by RJ's from various radio stations.

Post the training, the present batch made a difference by visiting many places and took formal-informal interviews that gave them good exposure and hand-onexperience.

The course ended with a Valedictory Ceremony where all the present batch RJ's were felicitated by dignitaries of our college; Principal Dr. J. Praveen, Director Dr. J.N. Murthy, CAO Dr. M.G Shekharam, Principal of Pharmacy **Dr. C.V.S. Subrahmanyam**



And Dr. K.Butchiraju, Program Co-ordinator of Pragya 90.4 FM.

They shared their experience and were happy with the course outcome. All members were delighted to see themselves in the poster that was unveiled. The event ended with a promise of encouraging students to pursue their passion as an RJ.



Mentoring is a particular form of relationship designed to provide personal and professional support to an individual. The mentor is generally more experienced than the mentee and makes use of that experience in a facilitative way to support the development of the mentee. The mentoring relationship provides a developmental opportunity for both parties and can thus be of mutual benefit. In a nutshell, a student mentor's role may be perceived to be facilitative, supportive and developmental for the student community in general and the first year students in particular. The orientation program commenced between 5th August, 2019 to 8th August, 2019 with the welcome of the students, their parents, dignitaries, faculty members.

Followed next was lamp lighting ceremony accompanied by a prayer song.

Next, a brief description of the institute, which included the motto, history and reputation of college along with recent achievements was given by our Principal Sir. Then our Director Sir interacted with the students and guided them towards a good future and maintaining a good persona. Followed by the respective HOD's briefing their newbies about their departments in specific.

OPINIONS

- Student bodies
- 1. student bodies in college aren't exactly well known
- 2. Few who know, want to join in 1st year itself
- Dress code for girls:
- 1. Many students, especially girls have expressed their concerns and confusion as the rules on dress code were not mentioned in detail unlike last time.
- Expectations from college
- 1. More hands on experience
- 2. Work on more real-time projects from early stage itself

OUTREACH ACTIVITY BY CSE

As part of the Outreach

Program, the CSE Department of GRIET invited the Senior Students of Zilla Parishad High Scholl (ZPHS), Nizampet to the CSE Department. To introduce Micro-controller technology and its uses. The workshop was held on the 3rd of August. 52 students at-



tended. The students showed great zeal and had a fascinating day and are eager to learn more. They learnt to execute simple programs like LED light switches, continuous blinking of LEDs and some more advanced like checking the moisture content of the soil, with the help of Arduino boards.



The In-charge of the program Prof. G. Malikarjuna Rao says the students were quick to understand the logic and have great potential. All the teachers present there enjoyed teaching these students. He further explained that since these children have never had the chance to explore this area, the

work-shop opened new doors for them. He mentioned that the program would be continued so the students gain more knowledge and also so more students would get the chance to participate since only limited students can be taken in at once.



Advaitha is newly inaugurated program under IEI student chapter by CIVIL DEPARTMENT

This word Advaitha is stimulated by the word "UNIQUE", And it mainly focuses on the students of Civil Engineering to guide them in civil purposes like house planning. Advaitha is basically subcategorized into two small chapters called Nirmaan and Histogram, This was handled by a bunch of student organizers under the supervision of Mrs I.CHANDANA, Faculty of CIVIL DEPARTMENT in a brilliant way. This event is conducted in forenoon hours from 9:30 am to 1:00 pm.



Nirmaan is basically a platform where students convert the 2D-plan into a 3D Modelling with different materials as well as different dimensions, it helps students to work on two basic foundations of Civil Engineering which are Dimensions and Materials. The Histogram is all about the presence of Civil Engineering in old historical monuments. Where students will be presenting the pictures and history of the monument along with the present status of the monument, they will be discussing the material used for the construction of the monuments and the duration for the construction of the monument.



OPINIONS:

It's the best opportunity to experience this thing in the first year itself, I am really thankful for the Advaitha team for conducting this event.

-Malavika and yashaswi
 First-year students,
 Civil department.



It was a wonderful experience working in teams. I really learned a lot of new and interesting things from other teams and a few secrets about the monuments, It really helped me to work on my Speaking Skills and Presentation Skills.

Liyak Ashraf Third-year student, Civil Department.

It's a brilliant innovation which really helps us to imagine and to be more creative, it really reflects the joy of civil engineering by doing this

> Sai tarun and Sai Kumar Second-year students, Civil department.





It was really fun turning this 2D-plan into a 3D model. I really enjoyed and glad to be part of this event

Soumika and deepika Second-year students, Civil department.

Al Machine Learning and Python Gaming Club

AI and ML being the fastest growing, powerful, and uprising technologies, have seen a surge of demand of industry professionals trained in these to the requirements of the industry. Said that Gaming Industry also being one among many that are steadily rising are finding ways and means to incorporate AI and ML into their gaming feeds to change the gaming experience completely. This workshop aims to bridge this gap for the students by giving them a brief insight into what both worlds have to offer.

Mihir Solanki, the student ambassador for Unity for our college and the Student coordinator of the event, started the session with a brief introduction about himself and Unity3D. Later started the session by talking about the pros-cons of gaming and how these software part of it runs in the background.

The software that was provided for the workshop were Unity, MiniConda, and Visual Studio Code.



Introduction to Python and ML

He began with the importance of why and how python and ML have changed the way gaming experiences, and how they work in the real world by giving realtime examples.

Later gave and insight on the working of Tensor Flow, which uses Neural Networks as a main component,

I.e.; a series of algorithms that endeavours to recognize underlying relationships in a set of data through a process that mimics the way the human brain operates. It adapts to changing input; hence generating the best possible result without needing to redesign the output criteria.

Imitation Learning

In this, he talked about how the AI is trained to simulate its own actions by observing and learning from human interface interactions.

He displayed this by showing a video by Unity where an Al bot being trained how to drive the car on a race track while learning from a human player.

ML Agents

This module was to talk about what and how ML Agents are used. Briefly said the Unity Machine Learning Agents (ML-Agents), is an open-source Unity plugin that enables games and simulations to serve as environments for training intelligent agents.

Later mentioned the uses of API, reinforced learning, training and testing and others in it.

Later gave an explanation on the concepts of designing and how it's used practically with a few more examples.

Post which the hands on experience started where the team was guiding all the participants on how to navigate and create a virtual simulation ground.

He enabled them to create an environment to develop simple designs like balls balancing on plates, how to work with the camera and how to

n Experience in L s utilizing Al and II 17th August 2019

create a brainchild (i.e., self-learning machine) for the simulation. Later helped the members to create their own environment and helped in designing the brainchild.

Review by Participants

Well all loved the hands on experience with the game designing software and felt that it was a much needed workshop which helped them understand these so early and know what happens behind the scenes.

All opinions in a nutshell, they loved it and would dig in for some more.

This workshop and event was carried out extremely well and look forward to many more in the future.



Firstly congrats on your win, how do you feel about it?

It was a bit of shock and surprise. Am just happy got selected cause this experience will help me grow and is sort of my 1st milestone.

How did you know about the event?

On 21st Wed Aug, after the Concert in the canteen, we were approached by Ramya Sree Mam and informed that a team from Radio City had come for conducting prelims of Radiocity Super Singer 11. Later on 23rd Friday, we went for the auditions at their Banjara Hills office after being called; then were told the selected candidates would be called personally upon selection.



On Sunday, Mounya, Sreevatsav, Nikitha found that they were selected for the finals. Well then I let it go and went on with my work. On Monday, mom woke me up after I had got many calls on my phone. On checking them, all being from Radio City I called them back. To my surprise I got selected and was really happy about it; they asked if I could come immediately to their office but told them would be there in an hour.

Upon reaching, they gave me songs to prepare and used the rest of the week to practice and become better in my vocals. Later the event took place in Sarath City Capital Mall on Aug 31, 6 PM onwards.

What were your Hiccups along the way?

Initially I was a little nervous as was the first time, we had a rehearsal with the whole Orchestra which didn't go well. So had to work on that. Another one was convincing Dad, as he wasn't very keen on doing this. But on letting him know that was a good exposure for me in the long run, he let me do it.



Was singing always your passion?

Yes it was; since 9th grade always keen about it. I did learn Carnatic music and still do. I won an Rs 50,000 /- cash prize, from which will probably buy a MacBook with plugins for music platform and mixing stuff.



Recent Innovations In Civil Engineering Materials

The Prestigious National Conference was conducted by the youngest department of GRIET, the Civil Department for the second time. The conference was aimed towards the Recent Innovations in Civil Engineering. Experienced industry officials-Mr V.V. Krishna Murthy and Mr. K. Krishna Murthy attended the conference.

Prof. J Praveen, Principal of GRIET, gave a thought-provoking talk on how there are so many new innovations like cement made of cigarette buds and ultra-strong materials which have been made. But the main aim of future engineers of India must be to produce things which are economical and have immense practical use.

Mr. M.G Shekaram, COA of GRIET, started his talk reminding us that progress starts from using resources and discovering new materials. He reminded how far humans have come from the Stone Age and encouraged the students to innovate economical solutions.

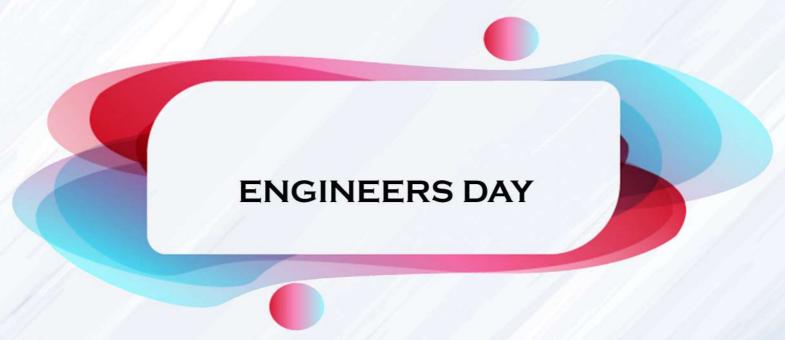
Mr. J.N. Murthy, Director of GRIET, gave us an inspiring speech which stressed on how civil engineering is the root of all engineering. It is the subject that made man curious and discover better materials.

Mr V.V. Krishna Murthy, Chief Guest, spoke about how the engineers of today need to focus on the immediate needs and have effective, optimal solutions. He said that the simple beam above our heads can be made with 20% less weight and still have the same capacity which has obvious advantages. And considering his nearly 6 Decades of experience we must take his word for it.

Mr. K. Krishna Murthy, gave a presentation on how buildings are designed practically and how the wishes of the client are dealt with and the modifications are done to suit the needs of the client. He gave brief run down on that with the example of a Gated Community which he worked on.

A Second Year student from Mtech says the conference was extremely interesting. And said that the Practical aspects of Design engineering weren't really touched upon in the syllabus and the conference provided a lot of insight into that matter. She also mentioned that she hopes there are more conferences like these which give them practical knowledge from industry experts.

Another student from Mtech II year also said that the conference was very informative. He got insight on the practical on-sight aspects. He wants to become a Designer and thought that he would like other conferences like these in the future.



f Every year 15thseptember is celebrated as the Engineer's day in India to give a tribute to the greatest Indian Engineer, Sir Mokshagundam Visvesvarya who also received India's highest honour, the Bharat Ratna in 1955. He holds some remarkable engineering constructions in his name. He was the chief engineer of the Mysore state, Vrindavan Garden, Krishna Raja Sagara dam etc. He was also the chief designer of the food protection system for the city of Hyderabad.

The civil department conducted the engineers day celebration on 17 August with a lot of vigour, many events were conducted to encourage students to take part actively such as listening skills, essay writing, group discussion, ppt, quiz and elocution.

Students from 1st year actively took part in the events since it being their first event since they stepped into college. The event was headed by (HOD OF CIVIL). The volunteers did a fantastic job in organizing the event. (TEACHERS) left an permanent mark by giving their valuable suggestion to the students.

Overall the event was a grand success





Abstract: Vivaldi antenna is a kind of slot-line UWB antennas, which is a high-gain and linearly polarized antenna. Theoretically, it has a very wide frequency band. And its gain keeps constant with frequency changed. This paper starts from by Introduction to antenna and its main Characteristics and later it tells you what is Vivaldi and its working, types of Vivaldi, its advantages and applications.

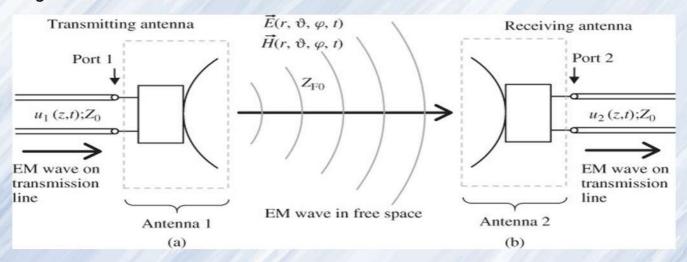
Introduction:

What is Antenna....?

An antenna is a specialized Transducer that converts radio- frequency (RF) fields into alternating current (AC) or vice-versa. There are two basic types: the receiving antenna, which intercepts RF energy and delivers AC to electronic equipment, and the transmitting antenna, which is fed with AC from electronic equipment and generates an RF field.

How does an Antenna Work....?

- The structure associated with the region of transmission between guided wave and free space wave (or) vice versa.
- Antennas convert electrons to photons (or) vice versa.
- Electricity flowing into the transmitter antenna makes electrons vibrate up and down it, producing radio waves.
- The radio waves travel through the air at the speed of light. Thus, produces an electric current that recreates the original signal. Transmitter and receiver antennas are often very similar design.



Main characteristics of antennas:

- **Directionality** an antenna may be non-directional (isotropic), transmitting uniformly in all directions, or directional –transmitting preferentially in one or more directions at a higher power.
- Radiation curve of an antenna a graphic three dimensional representation of the radiation intensity of the antenna, representing the distribution of the electric field and/or the radiation energy in the space surrounding it.
- Enhancement (amplification) of the antenna the ratio between the radiation power of an antenna in a certain direction, and the radiation power of an isotropic (omnidirectional) antenna under identical conditions of transmission (distance and input power of the antenna).
- **Polarization** direction of the electric field radiating from the antenna in areas sufficiently distant from the antenna (distance of number of wavelengths). A radio wave may be non-polarized or polarized (linear or circular/elliptical polarization).
- **Efficiency** The ratio between the total power radiated by the antenna and the net electric power fed to the antenna.
- **Band width** The width of a range of frequencies at which the antenna transmits its maximal radiation and intensity.
- Antenna array A systematic deployment of antennas that operate together. The individual antennas in an array are usually of the same type and are situated in close proximity and at a fixed distance from one another. An antenna array enables increasing the directionality and control of the main radiation beams and the lateral beams.
- Gain The gain of an antenna is a very technical measurement but, broadly speaking, boils down to the amount by which it boosts the signal. TVs will often pick up a poor, ghostly signal even without an antenna plugged in. That's because the metal case and other components act as a basic antenna, not focused in any particular direction, and pick up some kind of signal by default. Add a proper directional antenna and you'll gain a much better signal. Gain is measured in decibels (dB), and (as a broad rule of thumb) the bigger the gain the better your reception. In the case of TVs, you get much more gain from a complex outdoor antenna (one with, say, 10–12 dipoles in a parallel "array") than from a simple dipole. All outdoor antennas work better than indoor ones, and window and set-mounted antennas have higher gain and work better than built-in ones.

- **Bean Width** It is the aperture angle from where most of the power is radiated. The two main considerations of this beam width are Half Power Beam Width (HPBW) and First Null Beam Width (FNBW).
- Radiation Resistance is that part of an antenna's feedpoint resistance that is caused by the radiation of electromagnetic waves from the antenna, as opposed to loss resistance (also called ohmic resistance) which is caused by ordinary electrical resistance in the antenna, or energy lost to nearby objects, such as the earth, which dissipate RF energy as heat.
- The energy depleted by loss resistance is converted to heat radiation; the energy lost by radiation resistance is converted to radio waves. When the feedpoint is at a voltage minimum, the total of radiation resistance and loss resistance is the electrical resistance of the antenna.[1] The ratio of the radiation resistance to the total resistance is the antenna efficiency.
- The radiation resistance is determined by the geometry of the antenna, whereas the loss resistance is primarily determined by the materials of which it is made and its distance from and alignment with other nearby conductors or semi-conductors, and what those are made of. Both radiation and loss resistance depend on the distribution of current in the antenna.

Types of Antennas:

- Isotropic
- Anisotropic

Vivaldi Antenna What is VIVALDI ANTENNA? What does VIVALDI ANTENNA mean?

A Vivaldi antenna is a co-planar broadband-antenna, which is made from a dielectric plate metalized on both sides.

The feeding line excites a circular space via a microstrip line, terminated with a sector-shaped area. From the circular resonant area the energy reaches an exponential pattern via a symmetrical slot line.

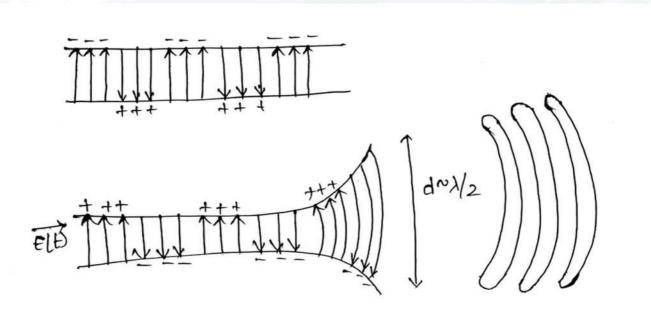
Vivaldi antennas can be made for linear polarized waves or – using two devices arranged in orthogonal direction – for transmitting / receiving both polarization orientations.

If fed with 90-degree phase-shifted signals, orthogonal devices can transmit/receive circular-oriented electromagnetic waves.

Vivaldi antennas are useful for any frequency, as all antennas are scalable in size for use at any frequency. Printed circuit technology makes this type antenna cost effective at microwave frequencies exceeding 1 GHz.

Advantages of Vivaldi antennas are their broadband characteristics (suitable for ultra-wideband signals), their easy manufacturing process using common methods for PCB production, and their easy impedance matching to the feeding line using microstrip line modelling methods.

The MWEE collection of EM simulation benchmarks includes a Vivaldi antenna.



Consider two Transmission lines and let the distance of separation between them be 'd'. Let, 'E(t)' be the oscillating time varying electromagnetic field by the conductors, λ be the wavelength.

Initially let the relation between the distance 'd' and wavelength be 'd<< λ ' when the conductors are not bent, because the field is confined to the area between the conductors.

When the conductors are bent at one end till the distance between them becomes ' $\lambda/2$ ', the radiation starts.

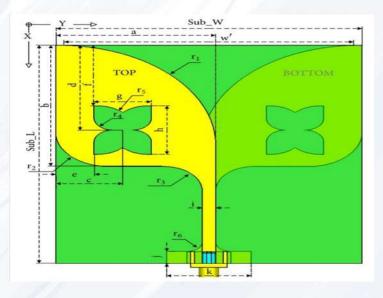
If the Vivaldi Antenna is on "Z" axis then the radiation curve can be given as x=eRZ. Where 'R' is the rate of tapering.

There are three significant types of Vivaldi antennas. They are

- 1. Antipodal Vivaldi antenna
- 2. Balanced antipodal Vivaldi antenna
- 3. Coplanar Vivaldi antenna

1. ANTIPODAL VIVLADI ANTENNA:

The AVA (Antipodal Vivaldi antenna) was initially constructed with a square microstrip patch length and width along with a microstrip transmission line mounted on a dielectric substrate. As the radiating element of AVA is a balanced structure, hence it was mandatory to create a balun which provide a match between 50 ohms microstrip feed line and the antenna. This balun consists of 50 ohms microstrip to parallel plate transmission line, which tapers into a slotline configuration and later feeds the radiating element. The final antenna features were achieved with the help of the shape and placement of introduced slots in front and back side of AVA.



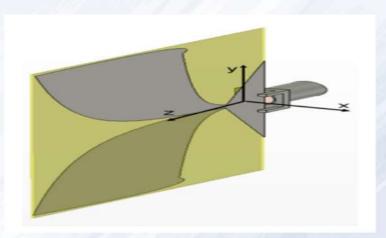
Advantages:

The portable miniaturized antipodal Vivaldi antenna has achieved satisfactory characteristics such as small size, fractional bandwidth, low cross polarization, low side lobes, as well and front to back ratio, stable radiation patterns.

Applications:

This is how a 3D structure of antipodal Vivaldi antenna looks like. This, AVA has wide range of applications. Some of them are

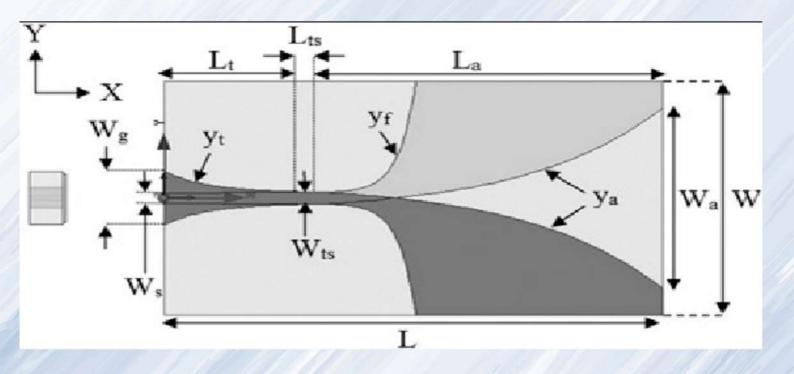
- · Engineering Harvesting
- · Microwave Imaging
- UWB Radars



2. BALANCED ANTIPODAL VIVALDI ANTENNA

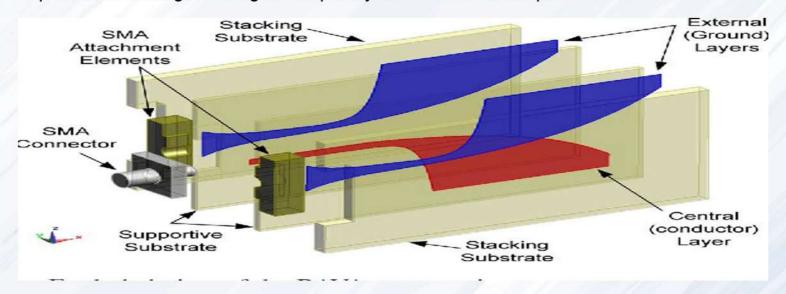
Design:

The Balanced Antipodal Vivaldi antenna or BAVA usually suffer from tilted beams and low axial gains. It mainly deals with aperture width. The balanced antipodal Vivaldi antenna tries to prevent this cross polarized radiation by adding yet another dielectric sheet on top of the antipodal structure, while a metal plate is put on the bottom of the antenna. The downside of this design is that the cost of a printed circuit board is significantly related to the number of layers and complexity of the design.



Advantages

The field coupling near the start of flare, which radiates at high frequencies is enhanced. Improved antenna gain at higher frequency band. Better cross polarization that AVA.



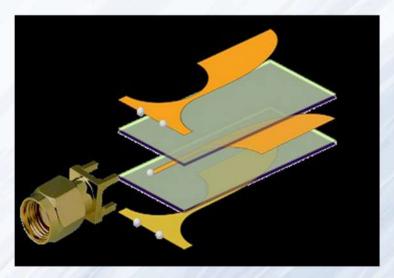
Applications

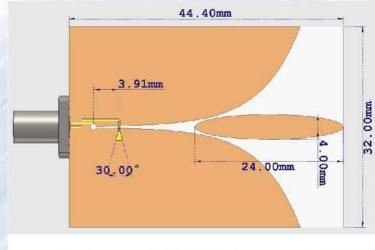
- · Ultra-wideband applications
- Radars

3.COPLANAR VIVALDI ANTENNA

Design:

The coplanar Vivaldi is the original design. It features two radiator planes on the same side of the dielectric sheet, the other side of which is a neutral material. This design and the more complex ones can all be made via printed circuit board technology.





Advantages:

The manufacturing of these types of antennas is easy using PCB production.

PROS AND CONS OF VIVALDI ANTENNA:

- Vivaldi antennas are planar antennas that work over a wide frequency range. Vivaldi antennas, like ridge horn antennas, have high gain due to their tapered slot design.
- Vivaldi antennas fit into smaller spaces than a ridge horn antenna because they can be made out of flat laminate.
- Vivaldi antennas are usually ultra-wide band antennas and always count as broadband antennas. They can be used with both multi-band and impulse technologies.
- When used for pulse technologies like radar, Vivaldi antennas have a high peak value for the pulse envelope. They offer stable group delay and allow for a narrow pulse width.
- Their upper frequency is limited by the width of the gap, while the lower frequency by the size of the opening.
- The design is simple compared to log periodic antennas and fractal designs. And all antenna designs can be scaled for use at any frequency.
- · Impedance matching is easy with Vivaldi antennas.
- Vivaldi antennas can be fed a signal directly from a strip line or microstrip line, which also allows them to work in phased array applications. You don't have this flexibility with many antenna designs.

DISADVANTAGES OF VIVALDI ANTENNA:

- The Vivaldi antenna with one frequency or a small range of frequencies, there are smaller and higher gain antenna designs. Gain refers to the ability of the antenna to radiate power in a specified direction.
- They cannot really be extended beyond 10 dB of gain, unless used as a dish feed.
- A Vivaldi antenna fed by an aperture coupling or broadband balun, can add complexity to the design. Making an antipodal Vivaldi antenna with the antenna elements printed on opposite sides of the PCB substrate, is more expensive than the basic design. The antipodal Vivaldi antenna's impedance matching can be done through a transition from strip line to a micro-strip line. However, this design increases cross polarized radiation.
- Antenna depth is a common problem for Vivaldi antennas. This is only partially resolved by putting dielectric covers at the aperture of the Vivaldi antenna.

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ARTS

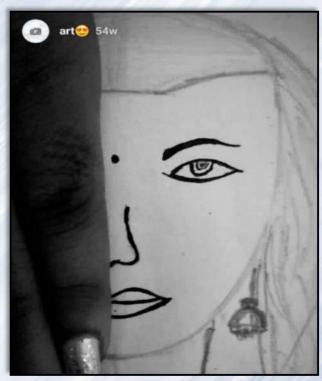






















Harshini 3rd year







Sreeja 3rd year,CSE Dept



P.Keerthi CSE-B



Nikhitha 3rd year



YOU

In those millions and millions of permutations and combinations of creation,
YOU are ONE and UNIQUE!
"Embrace Yourself"
- calvin Kris

SHARED VALUES, COMMON DESTINY

It is not just 'Give and Take',
It is all about 'CONTRIBUTE and
EARN'
- Calvin Kris



UN SUMMIT IN FRANCE: GENDER EQUALITY IN THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

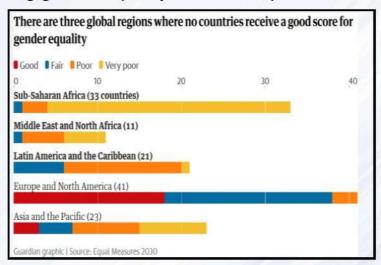


The UN created a new council 'G7 Gender Equality Advisory Council'. It was held in France and many important steps were taken to make the countries including the G7 to take solid steps towards equalizing the gender roles and rights. Here's some things you need to know as-well as the present situation.

- The first Global Index (2019) which measures the efforts made by countries towards gender equality showed that not a single country is set to achieve gender equality by 2030.
- In 2015 countries agreed that there is a need for financing for development and adopted a new Sustainable Development Agenda. This Agenda featured 17 Sustainable Development Goals (SDGs) and include 169 targets that aim to combat inequalities, end poverty, and promote prosperity while protecting the environment by 2030. A particular concern is that more than 50% of the countries scored poorly on efforts made towards SDG 5. Sustainable Development Goal 5, aims to end gender inequality and empower women. It includes specific targets to eliminate violence against women and girls, ensure universal access to sexual and reproductive healthcare, end female genital mutilation, uphold women's reproductive rights and fight against child marriage.
- In light of recent events like the rollback of abortion laws in the US and challenges to commitments to women's rights at the United Nations there is cause to worry about achievements made being undone. The US ranks 28th in a list of 196 and this shows that even in countries with a good score it is not guaranteed that progress will sustain and there will be no setbacks.

It seems like day-by-day parties that are against gender equality are growing more influential and have gained more power that helps them make changes to policies. If developed countries are part of worrying trends and policy changes that prove to be a setback to women's rights it gives leverage to other countries to repress women more.

As can be fairly assumed European and North American countries topped the index with African countries at the bottom. Although the different starting points of the countries in the index must be kept in mind. When viewed from that perspective developing countries have taken more steps towards ensuring gender equality than developed countries.



The index however can serve as evidence of gender equality that has long been asked by policymakers. It is disheartening to see that the goal for gender equality will not be met by 2030 as planned and there have been more setbacks than steps forward in the journey. This is an opportunity to step up again and work harder to create awareness and evaluate the current policies and efforts made. Check the relevance of these policies and come up with solutions that can help in achieving the goal of gender equality. With the Times Up and MeToo movement progress was made at least in increasing awareness and showed the strength of supporters of the cause.

Most countries – including the G7 – still have discriminatory laws that violate the rights of girls and women. Almost 40% have at least one constraint on women's rights to own property. The index and the above facts indicate that instead of looking to the European and North American countries, governments and the global population should work on their own solutions. It is also time to bring more and more men into the conversation. Men still hold a majority of the positions of power and there are a lot of male feminists who are more than willing to help. Afterall, Gender equality is not just a women's issue and for men too. It is for all of Humanity. To destroy stereotypes and to stop putting people into boxes. A person is not what their Gender Identity is while it is a part of them what makes a person is their Character.

-Vandana Yalla, II Year

Amazon On Fire

The amazon is being engulfed in fumes, as fires rage across parts of the rain-forest, endangering the so called "lungs of the planet" and the life thriving in it. The smoke was so intense, that it could be visible from the outer space.

The fires have affected the Brazilian states . Northern Roraima down the Amazonas, Acre, Rondonia and Mato Grosso do Sul have all been badly affected.



Brazil's National Institute for Space Research spotted more than 9500 new forest fires in Brazil since August 15 alone, while atmospheric monitoring agencies have tracked smoke from the Amazon region drifting thousands of kilometers across the Latin American giant to the Atlantic coast and Sao Paulp , briefly turning daytime in Brazil's biggest city to night on Monday .

The INPE recorded nearly 73,000 fires in Brazil between January and August this year - the highest since INPE records began in 2013 and a more than 80 percent bump on the figure for the same period last year. Most of them were in the Amazon.

Meanwhile, as of August 16, a NASA analysis suggested that "total fire activity across the Amazon basin has been close to the average in comparison to the past 15 years". NASA noted that the Amazon spreads across several countries.

What's causing them?

- Fires are a regular and natural occurrence in the Amazon at this time of year, during the dry season.
- But environmentalists and non-governmental organisations have attributed the record number of fires to farmers setting the forest alight to clear land for pasture and to loggers razing the forest for its wood, with INPE itself ruling out natural phenomena being responsible for the surge.
- Recent evidence appears to bear that out with preliminary data showing deforestation in the Brazilian amazon is skyrocketing under Bolsonaro's watch.

Web Scraping

Web scraping service providers have advanced over the years and one can actually take advantage of them. With their advanced resources and expertise, they can help you obtain data that is important and related to your business, so that you can focus on extracting valuable points from the data that is obtained through this web scraping. Suppose, if you are running a website similar to Amazon, then you can obtain the data of all the user's including their contact info, name and all the details that they have mentioned on your website. This will allow you to increase your percentage of sales. Web scraping is a common application used to find insights from scattered data. There are many tools present in the current world, which can be used to extract the data from websites and store them in a data file on your desktop. Few of the tools used for this purpose are Parsehub, octohub.

But, is web scraping a legal thing? The answer is NO.

There are few rules and regulations for web scraping, that just be followed before extracting data from random websites. And all website are not open for web scraping. It would just take a few minutes to extract the required data from a website using these tools.

If u are actually intrested to learn about web scraping , to get the data required , you have to master these skills :

- Grasp Python Web Scraping fundamentals.
 Use BeautifulSoup & Requests to scrape & crawl Craigslist with Python.
- Learn how to save your scraped output to a CSV / Excel file.
- Understand the difference between Web Scraping Python libraries and frameworks.

The coding required for web scraping need to be written using python, so you need to have a grip on python fundamentals.

Beautiful Soup is a wonderful package module that you use for web scraping ,so you need to know how it works before using it for scraping.

The data that you have extracted might be huge, you need to know how you can save it in a CSV/ excel file to have a perfect view of the organised data, to get proper insights. A CSV file is commoseperated file where values in the file are seperated by comma's.

So, to be a perfect web scraping person, you need to have a lot of patience and a proper idea of what information you are looking for.

-Rakesh Reddy, II year

CLIMATE CHANGE

According to a new U.N. report, the global warming outlook is much worse than originally predicted. Which is pretty bad especially since it's burning at a much faster rate. Already tonnes and tonnes of glaciers have disappeared, forests burning, the weather is erratic and there's Plastic in Antarctica's Air!!

The world is not a commodity, so we should stop treating it like one.



Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow.

We have to change, we have to adapt to climate change. There is a vital need to understand the magnitude of this issue. Whether we realize it or not, climate change is the biggest enemy we are going to be facing at our endgame.

When we focus more on our nation, we see many parts of India facing the direct consequence of climate change, be it, scarcity of drinking water, erratic monsoons, the melting Himalayan Glaciers.

In India, there is no specific legislation in place to combat the effects of climate change. It's high time our nation which holds a population of above 1.3 billion, starts to care about how it deals with the nature, our oyster is burning and we'll go down before the flames even catch permanently.

-V Karthik, II Year

An Extraordinary Persona..!

"I could either watch it happen or be a part of it." - Elon Musk

Yeah we are talking about Elon Musk. Elon Reeve Musk FRS is a technology entrepreneur, investor, and engineer. He is valued at 19.4 billion dollars as of August 2019.

His companies has drastically impacted our perception of the future. He is the founder of Tesla, Solar City, The Boring Company, SpaceX, OpenAl and NeuraLink. He also developed the most secure payment gateway PayPal.

Question Alert

How does a mere human being manage their time so effectively on such a busy, hectic schedule?

Elon Musk is possibly the busiest man on earth right now.

Musk is also a family man who spends up to four days each week with his five children. He also finds time for regular exercise. Many people point to Elon Musks' 'superhuman' ability to focus without distractions, or his freakish level of genius. But, there's a better explanation for his effective time management.

And the strategy practiced by him is "Time Blocking", a time management method used by highly successful CEOs, entrepreneurs and productivity experts, including Bill Gates.

Using the time blocking method, Musk intentionally plans his day out in five-minute increments or 'time blocks.' Each time block is assigned with a specific task or activity.

Time blocking forces you to fill up free time with pre-commitments and a plan of action. In doing so, you would also avoid the effects of the Parkinson's law which states that work tends to expand to fill the time allotted for it.

How has he impacted our lives?

His company SpaceX has made reusable rockets which saved millions on the other hand, Tesla has a phenomenal breakthrough in the field of Electric Cars. His companies Neuralink manufactures Brain-machine interfaces and many more. To summarize everything, Elon Musk has made our lives much more easier and has given prodigious contributions in the field of science.

-Tirumanpuri Rikshith

FICTITIOUS SERIES BY

SAMPREETH SHARMA A.P.L



30th December, 2018.

It's all greed, but that's agreed.

Hyderabad doesn't know what it is about to face and the team appointed to neutralize the threat is now in an uncomfortable situation. The man with zero experience in arms and camouflage, Kannayya, is sent to bust a potential suspect. The one with all the information about the crime world operations and the mafia don- Lancer Vine, Karim, lost his suspect. And the most experienced cop in stealth operations and terrorism, Sharma, has a gun pointed at his head and was instructed to cut the call.

The storm hit Hyderabad but the marathon for life never stop. The last hope to save the city, Operation Jack-Rabbit, had its first set back. The threat has become like the dark clouds under the night sky, unseen but surely felt. The heroes of the operation needed a miracle, something like a lightning to unveil the dark clouds, a clue to move forward. It's a dead end at the beginning of the road. What happens in the next 27 hours is terrifying when the best chance to save the city was at the wrong end of the gun.

. . .

Alpha Hotel, Secunderabad. 9.03 P.M.

Sudhamsu is at the Alpha hotel waiting for the heavens to stop pouring down. He has a calm look on his face, so calm that no one would ever know that he is carrying a gun at his

waist. He gets a call from Lancer Vine.

"Come to the lodge, now! I think we got the rat."

"What! I'm on my way, where is he now?"

"In the same lodge as ours, room number 107."

"Ok, coming."

"Inform..."

"Got it."



Sudhamsu is the most trusted comrade of Lancer Vine. He is a dark horse in the organisation, no one knows how he looks like and no one knows he exists. Basically, he is a dissimulation.

Lancer Vine is always careful about his empire. People say he was a chess grandmaster at the age of 13 when he was kidnapped and instead of being their victim, Lancer Vine has taken over the kidnapper's organisation with his brains. He is called 'The man with the plan' in his organisation. People have different stories on him, but no one knows what exactly happened. One things for sure, he is an angel of death, a November man. He leaves a trail of bodies behind if things don't happen as he planned.

Being in the shoes of Sudhamsu is quite difficult. No one can ever know he exists and if anyone does, they cannot. He is important for Lancer Vine to take care of the internal affairs of the organisation. He deals with all the arm and drug trades. Police can never know him, because he doesn't have a digital fingerprint, no criminal records not even a speeding ticket. If he is ever caught, he's just thin air.

Lancer Vine is an international king maker, not a local kidnapper doing it for money or personal revenge. He is neither a psycho nor a sadist. The most powerful and influential in the world are the ones in the dark, Lancer Vine is one of them. He always dealt with the other gangsters in the country and about the trail of bodies... they were all gangsters!

An organisation with one brain as good as a grandmaster and the other who is invisible for the police is never meant to see a downfall unless there is a leak from inside or someone penetrates deep into it and know the laws and the flaws. The latter happened.

Lancer Vine and Sudhamsu suspected there is a rat in the organisation set up by Karim's team that was helping them to counter plan the most wanted criminal in India. They needed to divert police onto something more important and plan an escape route out of this situation. They needed to buy time from the police so they decided to maintain a low profile for few weeks.

Of course an organisation with such vast network would have its legacy in the police department. They had their informants in the department working on who is that filthy police officer is in the organisation leaking information that's increasing friction in their trades. On a whole departments and organisations are invaded and patriotism is just a word.

. . .

Khairthabad. 9.03P.M.,

Kannayya took the assistance of the local SI and made the operation look like they are arresting the potential suspect for being a local drug dealer. He planted the drugs in the suspect's house before approaching the police for assistance. He alone could only plant the drugs, but needed combat assistance in case things go out of control.

For the neighbourhood, the police rode the suspect's house and arrested him for having drugs. Unfortunately that's all the combat team knows as well. The busting was more smooth and easier than what Kannayya expected and the suspect was masked as he was walked to the police vehicle. Kannayya couldn't let the SI interrogate him and so had to divert the team onto something else so as to smuggle the Jack-Rabbit to their base of operations, the lodge.

"Sir, I think it's better to have him in a separate vehicle other than a police car. If he is a drug dealer, maybe he might have big contacts. What if there is anyone who knows him is in this neighbourhood and inform others to attack the police vehicle? Looking at this place, I feel something's not right. It's better to take him in disguise, in my car."

Kannayya knew the inspector wouldn't be very convinced with the reason. He needed to add the most important ingredients for a pizza, cheese and butter.

"Trust me sir, I would say you got the lead and arrested him with your plan. The promotion would be yours and of course, you would take me with you, at least a head constable when you will be my CI."

Kannayya knew his SI was corrupt and entered the department politically but could never grow beyond being an SI. He used his weakness of wanting to be a CI and diverted the Jack -Rabbit to his car. He was en route to the lodge.

Kannayya took the wheel and the Jack-Rabbit was handcuffed in the back seat. He had a grin on his face, bright and broad. He knew he did his part smoothly and was having his moment as he drove along the necklace road. He was curious to know the updates with his teammates and decides to check up on them. He looks into the rear view mirror as he searches for his phone and notices the Jack-Rabbit to sit idle and silent.

"What are you thinking?"

The suspects stays quite. Kannayya reaches to his phone and calls Sharma.

Surprise! Surprise!

The phone's switched off! He is not used to this, Sharma would leave a message if his phone was dying, after all Kannayya was his only partner undercover.

"Didn't he answer the call?" whispers Jack-Rabbit.

Lodge, Room No.403. 9.03 P.M.,

Cut the call.

Sharma is not a person who falls into traps easily but he knew, he underestimated the threat. He was trained all his life to deal with these situations and now is the time to use his skills. He has two options in front of him, either to get into a fist fight or negotiate with the man holding the gun. The outcome of the first is uncertain so he decided to go with the latter.

With an intentional trembling voice he says, "I- I know... you're not going to shoot me... because if you were to shoot me, you would have done it outside my room where you saw me. I think we are here to negotiate something, isn't it?"

There's something with Sharma, he carries awkward silence with him, but to break it, the man comes out of the darkness and stand in front of him. Now the gun is at his heart. Sharma had to pretend as if he's afraid and yet be able to tackle the situation, so he fixed his eyes to the gun's trigger.

"Relax Mr. Vishal Acharya, we have a long night ahead!"

Entire world, including his wife know him as Krishnamachari Sharma. He hid the truth of his real name, Vishal Acharya from everyone, only 7 people are meant to know it. What happens when such conspiracy is leaked to an eighth person?

Chill goes down the spine for Sharma, he is damned.

. . .

Lodge, Room No. 404.

9.05 P.M.,

Sudhamsu is drenched in the rain and Lancer Vine is helping him dry up. As he continues to wipe Sudhamsu's chest, he says, "Sidharth called in the evening. He told me they were coming to the lodge in the night."

"How's he sure about it?"

"He has been following him for more than a year now. We can trust him."

"What do you plan to do with him now?"

"Get to know what all he know", Lancer Vine stops wiping and stares at blankness "and take him to a forest tour."

By forest tour he meant killing him and throwing his pieces for the foxes and the vultures.

Sudhamsu loads his gun and puts it back in his holster. He goes topless out of his room when he sees a couple cuddling in the corridor and go to room number 402. He smiles to himself and decides to listen to what is happening on the other side of that door, he's got enthusiastic nuts. As he walked towards 402, he noticed room 403's door to be open.

What's in room 403?

. . .

Lodge, Fourth Floor.

9.07 P.M.,

Lancer Vine rushes out of the room with the photo of the rat in his phone and shows it to Sudhamsu. It is Saifuddin Karim, the head of the operation, along with Asif Ashraf, his subordinate and also the man with the gun pointed at Sharma in room number 403.

Sudhamsu falls onto the door of room 403 which is not locked, to see Asif holding his gun to Sharma's heart.

Awkward silence. Of course, who is around?

Lancer Vine Peeps into the room as well when Asif gets flabbergasted looking at him and points his gun with shivering hands to him.

Just then Asif receive a call and he answers it. It's Karim.

"Sharma is alone in the lodge. I'm starting here and Irfan is with me. We are coming. And yes, be careful, Lancer Vine is in the room 402. Let's get all of them at once..."

Karim continued to talk about the plan but Asif is already fused out. He couldn't hear a single word from Karim as he couldn't focus. With his shivering hands and tensed head, he loads his gun and points it at everyone but he knew he was dead.

He was so confused that he shot a bullet at Sharma in the chest when Sharma descend to the ground.

Sudhamsu pulls his gun out and shoots Asif point blank to spray blood all over the walls like modern art!

In this chaos, Lancer Vine looks at Sharma on the ground and exclaims, "Vishal!" in anguish.

Vishal!

"What was that? What did you do you moron, are you there? Don't tell me you messed up the plan! Reply something for god's sake..." yells Karim over the call.

Sudhamsu takes the phone covered with dead Asif's blood and replies, "come here you freaking rat!"

Karim remained silent for almost 15 seconds.

"Good to hear from you, Sudhamsu."

Beep... Beep... Beep... Beep











A tree gets new leaves in Spring but becomes dry in Summer and again shows the beauty of tree in Rainy and Winter...

CAN'T YOU ??



GeM - Annual Magazine 2018-19



GeM - July 2019

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