RISE KRISHNA SAI PRAKASAM GROUP OF INSTITUTIONS :: ONGOLE

(APPROVED BY AICTE-NEW DELHI, AFFILIATED TO JNTUK KAKINADA)

Accredited by "NBA" for B.Tech in ,Civil, EEE, Mechanical and ECE

ELECOMM 2K20

DEPARTMENT OF

ELECTRONICS AND COMMUNICATION ENGINEERING

AY : 2020-21

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Contents

ABOUT THE DEPARTMENT

The Department of Electronics & Communication Engineering came into existence since the inception of the college. We proceed with an aim to produce highly qualified and qualitative individuals in the society with both theoretical and practical knowledge. We impart the needed technical knowledge in students and they are encouraged to get hands-on experience by organizing seminars, workshops and symposiums in the campus to enhance their skills and make them industry worthy.

VISION

To become a center of excellence in Electronics and Communication Engineering to meet the global technological and industrial requirements.

MISSION

M1: Provide modern technical knowledge, professional skills and attitude to meet industry and society needs.

M2: Promote innovations through professional training and development.

M3: Develop a team with professional ethics and social responsibility.

OBJECTIVE

The institution has the broad objective of being an active agent of change by responding to the needs and challenges of the times. This will be achieved basically through the process of education training and research.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: **Core Skills**

Intensive and extensive engineering knowledge and skill to understand, analyze, design and create novel products and solutions in the field of Electronics and Communication Engineering.

PEO2: **Problem solving & Lifelong learning**

Capability to pursue career in industry or higher studies with continuous learning.

PEO3: **Entrepreneurship Skills**

Leadership qualities, team spirit, multi-disciplinary approach, character molding and lifelong learning for a successful professional career.

PEO4: **Professionalism**

Professional and ethical attitude, effective communication skills, and sense of responsibility towards society.

PROGRAM OUTCOMES (POs)

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural science and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal and environmental considerations.
4. **Conduct investigations of complex problems:** Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment sustainability:** Understand the impact of the professional engineering solutions in the societal and environmental contexts, and demonstrate the knowledge of,and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics, responsibilities, and norms of the engineering practice.
9. **Individual and teamwork:** Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, andgive and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one‟s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Lifelong learning:** recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broader context of technological change.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

PSO1: Design and implementation of complex systems by applying basic concepts in Electronics & Communication Engineering to Electronics, Communications, Signal processing, VLSI, Embedded Systems (Core Skills).

PSO2: Solve complex Electronics and Communication Engineering problems, using hardware and software tools, along with analytical skillsto arrive cost effective and appropriate solutions relevant to the society. (Problem-Solving Skills).

PSO3: Quality in technical subjects for successful higher studies and employment (Professional Career).

MESSAGE...

Mr. I.C. Rangamannar,
Hon'ble Chairman,
The RISE Krishna Sai Groups of Institutions

It is my pleasure to acknowledge the students of the Elections and Communication Engineering Department. These graduating students have been demonstrating excellence in the areas of problem solving, analytical methods and teamwork skills, and have immense potential for leadership and life-long learning. I congratulate each of you for your dedication and hard work, and we welcome your future endeavours and support of the Electronics and Communication Engineering Department.

Mr. Sidda Venkateswara Rao,
Hon'ble Vice-Chairman,
The RISE Krishna Sai Groups of Institutions

If information alone is education, today's students require no assistance at all to make strides in their fields. Technological devices can be their best source of learning. But there is a lot to learn on the part of student besides academic information. Character building ought tobe one of the cardinal objectives of education. I give importance to education based on character.

Dr. A.V. Bhaskara Rao

PRINCIPAL

The major challenge for today's engineering educational institutions is to accommodate the ever varying aspirations of the younger generation because of increasingly changing demand and development in industries. We constantly put efforts to accommodate these aspirations by fine tuning the academics of college with innovative and practical oriented teaching - learning practices along with other developmental activities. Our institute stands by its core values, mission of churning out well-rounded individuals and thorough profession.

Dr. Ch.VenuGopal Reedy

Prof.& HOD-ECE

The Department of Electronics and Communication Engineering is one of the most dynamic departments of Rise Krishna Sai Prakasam Group of Institutions. I am really elated to tell that the department stands on the strength of experienced and well qualified faculty who are very dedicated to teaching and also involved in up-gradation of knowledge. Their research experience will help to cultivate the future of our students. With great demand in industry and great placement opportunities, the department stands tall and proud.

FROM THE EDITOR'S DESK

Dear Students,

We hearty welcome you to the newly launched ECE Department's Magazine for the academic year 2020-2021. The objective of the magazine is to mainly focus on achievement of the students from the ECE department in the Co-curricular and Extra-Curricular Activities. I congratulate all my team members for their constant effort in launching this Magazine. We are also thankful to our Management and Principal for their support and encouragement. Finally, we are gratified to our reviewers for their frank opinions and constructive suggestions, namely our colleagues and students.

FACILITIES & INFRASTRUCTURE

1. LABORATORIES

The department of ECE has well equipped and high quality laboratories Listed below .

- Electronic Devices and Circuits Lab
- Electronic Circuit Analysis Lab
- Pulse & Digital Circuits Lab
- Analog communications Lab
- Linear Integrated Circuit Analysis Lab
- Digital Communications Lab
- MW&OC Lab
- VLSI Lab
- DSP Lab
- Microprocessor & Microcontrollers Lab
- DSD & DICA Lab
- Projects Lab
- Research Lab



2. DEPARTMENT LIBRARY

Our college library occupies a prominent position and it is an important and integral part of the teaching programme. It is not merely a depository of books, but an active workshop instrument in the production of or original thinking. The aim of college education and college libraries in inter-related. College library extends opportunities for self-education to the deserving and enthusiastic students without any distinction. These libraries develop in each student a sense of responsibility in the pursuit of knowledge. College library stimulates the students to obtain, evaluate and recognize knowledge and to familiarize themselves with the trends of knowledge for further education and learning new Disciplines.

"Libraries are reservoirs of strength, Grace and wit, reminders of order, Calm and continuity, Lakes of Mental energy, Neither warm nor old, Light nor dark. The pleasure they give is steady, Unorgastic, reliable, Deep and long-lasting. Germaine Greer"

3. COMPUTING & INTERNET FACILITY

The RISE campuses are connected with Intranet facility with which students make use of all the books and materials and other references through Computer Assisted learning around the clock. Intranet facility can be put to constructive purposes by allowing all the students and faculty to share information with one another and exchange new ideas to improve teaching and learning methods, increase productivity, and promote greater friendliness and better coordination.

WI-FI facility: The facility acts as the best technological companion to the students. They are able to procure academic richness depending on the global technological resources

ACADEMIC TOPPERS:

University end Examinations Toppers

2017-2021 BATCH:

Roll Number	Name of the Student	Percentage
178A1A0404	BOLLEPAKA HARIKA	83.24
178A1A0432	NANDANAVANAM ASRITHA	82.67
178A1A0462	BADDELI SARANYA	82.11

2018-2022 BATCH:

188A1A0426	SATTENAPALLI SUSMITHA	88%
188A1A0420	PALAGADA RAMYA KUMARI	83%

2019-2023 BATCH:

198A1A0478	CINTHALA.KAVITHA	84%
198A1A04974	SANAM PRIYA VARSHINI	81%

CINTHALA.KAVITHA

SANAM PRIYA VARSHIN

GENERAL ARTICLES:

A SO CALLED LIFE …

On the earth time is considered as a precious thing.When I was a child my teachers always said one thing that is ***"dont waste your time".***Then I didn't think of why they are saying so? And I even didn't know what it really mean.In our childhood everyone wants to enjoy and makes some fun,on doing that we were used to waste our time. As a child we all thought that making memories with friends and having fun is considered as a precious thing.At some point we will able to know what the real meaning of precious-"***this means which we will never get back in our entire life when we miss it once".****That is why as a child everyone wants to make some beautiful memories because when we look back we only can recollect our memories but we can't get them back. Because of it we are considering memories are precious one's.*

Here we are missing a small point that is memories are all about recollecting our past, past means **"time"**, so that time is considered as a precious thing in the whole earth. Our teachers always says if we utilize our time in a good way it helps in the future If we waste our time we will face it's result in future.

That means everything is connected to time.What we did in past and what we do in present will result our future sooner or later.In another word we can call it as "**karma".** Utilising our time in a good way doesn't mean studying 24 by 7 and not to enjoy or restricting our freedom.

When we are able to balance them we are matured then we will able to recognise our dream and realize about career.For example like food our life should be balanced too.If one spice dominates the food it will effect our taste like that if one emotion dominates it will effect our life.

That's why everything should be balanced in life and our life is connected to time.Time is considered as a precious one,like time our life is precious too.We are the engineers of our life.Time wouldn't stop for anyone like it our life also shouldn't be stopped by others words.If we Persue our dream,make ourself proud they will be stopped that is life.We can also say it A SO CALLED LIFE.

S.*Vishnu Priya*
208A1A0417
ECE-1,2nd yr

THE GIFT OF FIRE

Let us enjoy reading this Greek Mythological Story of The Gift of Fire. Fire being so important to us, it is not surprising that several mythologies of the world contain references to how fire was first revealed to or obtained by man.In Polynesian mythology it was the god Maui who gave fire to mortals after stealing it from the fire goddess. Prometheus of Greek mythology too stole fire from the gods to give to man. The Bushmen of the Kalahari Desert have their own legend about fire. Interestingly, in their tale, man gets fire through his own efforts and not through the kindness of any god.

R Sai charan
208A1A0444
ECE-1 PRAKASAM

THE OSTRICH STRETCHES IT WINGS

-A Bushman Legend Mantis, the creator-god, felt that mankind was not ready for the gift of fire. So he entrusted it to the ostrich who kept it safely under one of its wings. A Bushman learnt that the ostrich had fire and made up his mind to steal it. So one day he paid the ostrich a visit."I've come to tell you my dream," he said."Why should your dream interest me?" asked the ostrich."Because it concerns you," said the Bushman."In my dream I learnt that if you were to stand with your wings spread out in the strong wind preceding dawn, you would soar into the sky like an eagle.""That's interesting," said the ostrich, secretly thrilled. Its greatest wish was to be able to fly."Do not pass up this chance to get the gift of flight," advised the Bushman before leaving. Before dawn the next day, the

ostrich spread out its wings and waited to be lifted into the sky. As it waited, the Bushman crept up to it, grabbed the fire and ran.That is how people got fire and that is why, say he Bushmen, the ostrich is not as smart as other birds. The loss of the fire upset it so much that it became feebleminded.

R Sai charan
208A1A0444
ECE-1 PRAKASAM

MUSIC

Music plays a huge role in a teen's life. Many of them listen and play music to express themselves, especially to express their pent-up angst. This also explains why many go gaga over bands. Speaking of bands, you can write articles about upcoming and popular musicians or music groups, the songs they play, where they're playing next, types of shows or concerts in which they are appearing, the story behind their success, their upcoming tours, etc. "The music is not in the notes, but in the silence between". Music has great qualities of healing a person emotionally and mentally. Music is a form of meditation.

While composing or listening music ones tends to forget all his worries, sorrows and pains. It has the power to cure diseases such as anxiety, depression, insomnia, etc. The power of Music can be testified by the legends about Tansen of his bringing the rains by singing Raag Megh Malhar and lighting lamps by Raga Deepak. It also helps in improving the concentration and is thus of great help to the students. Music is known as the Universal language because it knows no boundaries. It flows freely beyond the barriers of language, religion, country, etc. Anybody can enjoy music irrespective of his age.The research has proved that the plants which hear the Music grow at a faster rate in comparison to the others. Finally we understand the meaning of the music based on our situation

M.Vineetha Lakshmi
III-ECE I
198A1A0421

TIME

Time is very precious and we should not waste it in any way. Likewise, we can earn the money we spent but we cannot get back the time we have lost. So, this makes the time more valuable than money. Hence, we should utilize the time in the most possible way.

IMPORTANCE OF TIME:

Time does not wait for any one. Whether you like it or not, the fact is time will never stop. It will keep going on. This is an old belief but it still holds true. Time gives you only one chance and you have to make the best of it. A moment lost, is lost forever. You cannot go back and reverse time.Never postpone things for the next day. Today is important. So complete your task today rather than leaving it for tomorrow. Leisure is enjoyable but after a fruitful hard work.

VALUE OF TIME:

Although most people do not understand how valuable time is until they lost it. Besides, there are people in the world who prioritize money over time because according to them, time is nothing. But, they do not realize the fact that it is time that has given them the opportunity to earn money. Apart from this, the time has given us prosperity and happiness and on the contrary, it has also given us sorrow and grief.

We can say that time is the greatest gift of God. Moreover, there is a saying that "if you waste time, time will waste you." Only this line is enough to justify how important and valuable time is. Finally we say that Time moves speed based on our situation for example if we are in bad mood time moves very slowly and if we are in happy mood times moves very fast.

P.V.Jyothirmai
198A1A0432
IIIrd ECE-II

IF YOU WANT TO....

If You Want to control, If You Want to admire,

Admire God's Creation.

If You Want to give,

Give justice to everyone.

If You Want to win,

Win the hearts of others.

If you Want to enjoy,

Enjoy the moments of life.

If You Want to think,

Think about the good of mankind

Control Your desires.

If You Want to praise,

Praise the Almighty.

BY
CH.SAILAJA
198A1A0410
ECE, 3rd year

TECHNICAL ARTICLES:

MAGLEV Trains

Kavali. Aravind. III-ECE II, Roll No: 208A5A0408

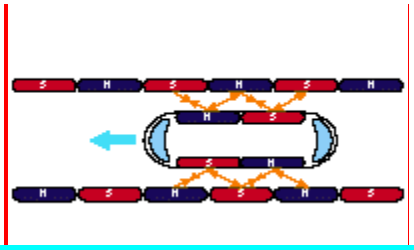
We have always thought of aeroplanes as the fastest mode of transportation. As it travels thousands of miles in an hour we do not mind the flight delays and also the risk in flying. There is no other alternative to planes that can travel such a great distance in minimum amount of time. Buses, cars, boats and even conventional trains seem to be too slow in comparison to planes. Now a new transportation mode has occurred that can clearly compete with planes in both speed and safety. They are called MAGLEV trains. The full form and the basic working principle of MAGLEV is called Magnetic Levitation.

Magnetic Levitation

The principle of magnetic levitation is that a vehicle can be suspended and propelled on a guidance track made with magnets. The vehicle on top of the track may be propelled with the help of a linear induction motor. Although the vehicle does not use steel wheels on a steel rail they are still referred to as trains as by definition they are a long chain of vehicles which travel in the same direction. This is the definition of a MAGLEV train. As the frictional parts are minimum in this type of technology, the MAGLEV trains are known to have more speed, smoothness and less sound.

Working of MAGLEV Train

The train will be floating about 10mm above the magnetic guiding track. The train will be propelled to move by the guide way itself. Thus, there is no need of any engine inside the train. The detailed working of MAGLEV train is shown in the figure below. The train is propelled by the changing in magnetic fields. As soon as the train starts to move, the magnetic field changes sections by switching method and thus the train is again pulled forward. The whole guide way is run by electromagnets so as to provide the magnetic effect.



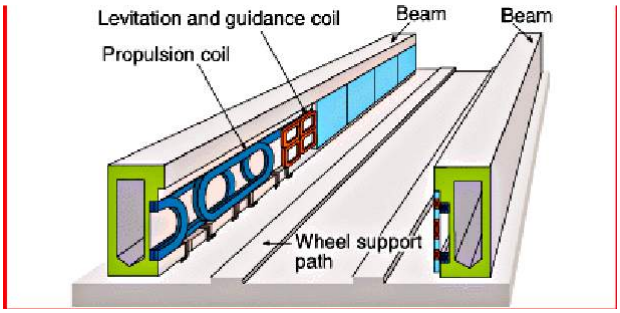
Thus the power needed for the whole process is less when compared to a conventional electric train. Amongst the power used, only a little is used for the levitation process. But a higher percentage of power is needed to overcome air friction.

MAGLEV v/s Conventional Train

The main difference between both the trains is that conventional trains need steel wheels and a steel track for their movement and MAGLEV does not need wheels. They travel under the principle of electromagnetic suspension. Another difference is in the engine used. MAGLEV trains do not need engines like conventional trains. The engine used for conventional trains provide power to pull a chain of compartments along steel tracks. In MAGLEV trains, the power to propel the train is provided by the magnetic fields created by the electric coils kept in the guidance tracks which are added together to provide huge power.

MAGLEV Track

The track along which the train moves is called the guide way. Both the guide way as well as the train's undercarriage also have magnets which repel each other. Thus the train is said to levitate about 0.39 inches on top of the guide way. After the levitation is complete, enough power has to be produced so as to move the train through the guide way. This power is given to the coils within the guide way, which in turn produces magnetic fields, which pulls and pushes the train through the guide way.



The current that is given to the electric coils of the guide way will be alternating in nature. Thus the polarity of the coils will be changing in period. Thus the change causes a pull force for the train in the front and to add to this force, the magnetic field behind the train adds more forward thrust.

Commercial use of MAGLEV Trains

- The first known commercial use of MAGLEV train was in the year 1984 in Birmingham, England, and the train was named MAGLEV itself. But due to less reliability, the train was stopped by 1994.
- The most famous commercial MAGLEV train is the Shanghai MAGLEV train in Shanghai, China. The train can go in a top speed of 270 miles/hour with an average speed of 160 miles/hour.
- Since these trains move on a cushion of air, there is no friction at all [except air friction]. The trains are also aerodynamically designed which enables them to reach great speeds like 300 miles/hour and so on. At 300 miles/hour you can travel from Rome to Paris in about 2 hours.

Electronic Ink (E-ink) Technology

Komaraneni. Rajesh, III-ECE II, Roll No: 208A5A0409

We have seen the working of electronic displays like Liquid Crystal Displays, SED TV's, and Touch screen technology and so on. Even though we rely mostly on monitors nowadays we must not forget the fact that the basic display mechanism is paper the early 105 AD when the Chinese invented it. Before the invention of paper, the only way to print your writing was on silk scrolls, which only wealthy people could afford. This would have made literacy rate lesser.

People communicate through paper by writing on it with ink. They display their ideas with the help of words and images, which may differ in many languages as well. The paper technology has not yet been beaten by other display technologies in the matter of portability and price. But this technology also has some disadvantages like you cannot rewrite on top of the printed words and it is difficult to carry a large number of books. Now, these disadvantages are also being minimised with the help of a new technology called electronic ink [e-ink]. In this post we will discuss about how e-ink is made, how large bundles of books can be carried easily and its efficiency in replacing other computer displays.

Making E-ink

E-ink may look similar to the regular ink, though they are different. In fact it can also be applied on the same material in which regular ink is applied. Although different companies manufacture E-ink in different ways, there are three basic components that give them the ability to rearrange upon command. They are

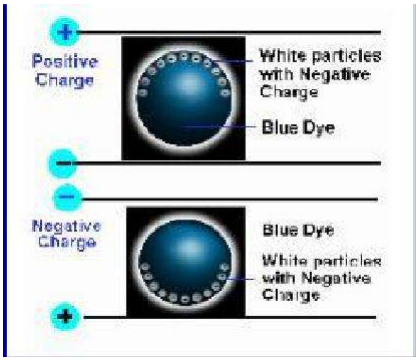
1. Millions of tiny microcapsules
2. The ink substance present in an oily form which fills the microcapsules
3. Negative charged pigmented chips or balls which float inside the microcapsules

When using the e-ink in a digital book, the pages will be made of an ultra-thin plastic material. The ink is allowed to spread through the entire page, and they will be separated by cells that somewhat resemble the cells on graph paper. They also resemble to the way in which pixels are arranged on a computer screen, with each cell connected to microelectronics which are embedded in this plastic sheet. When this type of a design is setup the text or image that is to be displayed is done by applying a positive or negative charge to the microcapsules.

A company called Xerox from Palo Alto, CA is one of the major manufacturers of E-ink. To know the working of this technology in a better sense, the company has given a better example. You have to compare the microcapsules inside ink to clear beach balls. These beach balls should be filled with hundreds of tiny, white ping-pong balls. And instead of air, the beach ball is filled with a blue dye. If you notice this design from the top position, you can see that the beach ball is white in colour and that the smaller ping-pong balls are floating in the liquid. If you looked at the top of this beach ball, you would see the ping-pong balls floating in the liquid, and the beach ball would appear white. But if you looked at the bottom of the ball, it would appear blue.

If these beach balls were laid on a field and the ping-pong balls were made to move between the top and bottom of the beach balls, you could make the field change colour. This is the basic working of E-ink. Now in reality, the microcapsules are very small that almost 100,000 microcapsules can be

put in a square inch of paper. Their width does not exceed 100 microns and each microcapsule contains hundreds of smaller chips. Given below is a diagram on how the pigment chips inside the E-ink reacts to the +ve and –ve charges.



From the figure you must have noticed that when a charge is applied to the microcapsules, the chips are forced to move to the top or pulled down to the bottom. When they move to the top, the chips make the capsules look white and when they are pulled down to the bottom, the capsules look dark. This is because the person seeing it only sees the dark ink. When these small black and white spots are arranged in patterns, words, sentences and images can easily be formed.

Uses of E-ink

The biggest advantage of E-ink is that it can be easily printed on surfaces like walls, billboards, clothes and so on. This idea has already caught the eye of many advertising agencies and you may have noticed advertisements on walls using this technology. The ink is so flexible that it is possible to develop roll-up displays for electronic devices. They also need very little power for its usage. When compared to LCD displays, they consume almost 100 times lesser power than LCD's do. Another advantage includes its readability. As the text is printed in format, it does not cause strain to the eyes. There are studies going on in increasing the resolution in products so that they can be viable in book or other small-print publications.

One of the main use of this technology is its application in digital books which can typeset itself and that readers could go through it like it were made of regular paper. You could even borrow stories from the library by wireless transaction and after reading it you can send it back to the library. Nowadays you may have noticed the presence of E-books that are available in sites in downloadable format. The above mentioned ways are applicable in the way you receive your newspaper as well. All you have to do is press a button on your computer that would update how many ever 'e-newspapers' you need. Thus you will have no worries on what to do with the lump of papers at your home. As papers are made from trees you are able to reduce the environmental pollution by lessening the cutting of trees.

Photonic Integrated Circuit Technology

Surisetty. Narendra, III-ECE II, Roll No: 208A5A0412

Photonic Integrated Circuit (also known as PIC), is a complex integrated circuit which incorporates a lot of optical devices to form a single photonic circuit. The main difference between a PIC and an Electronic IC is that PIC is analogous to an Electronic Integrated Circuit. Many optical devices like optical amplifiers, multiplexers, de-multiplexers, optical lasers, attenuators and also detectors are integrated on to a Photonic Integrated Circuit. For a large-scale operation of such a device thousands of optical devices will be integrated on to the device.

In a PIC, the signals are sent by superimposing them on wavelengths usually in the range between the visible spectrum and infrared. The range usually is between 800 nanometers and 1700 nanometers. In 2005, during a development of a laser light through silicon in an electronic integrated circuit, there occurred a problem with quantum noise, which prevented the generation. This problem was easily overcome by a photonic integrated circuit, which easily created the laser light and that too in a higher bandwidth, within the circuit as a single medium. Thus the importance of PIC was known.

Photonic Integrated Circuits vs Electronic Integrated Circuits

The main difference between PIC and Electronic Integrated Circuits is in the type of material that is used for its fabrication. In the case of an electronic IC, the most dominant material that is used is silicon. But, in the case of PIC, the fabrication material mainly depends on the purpose of the device. That is the material will depend on the function that is to be integrated by the device. The most common materials that are used for its fabrication are a mixture of silica on silicon, silicon on insulator, and so on. Apart from these mixtures even some types of polymers and semiconductor materials are also used to make lasers like which are used to make semiconductor lasers such as Gallium Arsenide [GaAs] and Indium Phosphide [InP].

The fabrication methods for both the devices are the same. Photolithographic methods for etching and deposition of material are the same. The difference is in the primary device that is used for fabrication. In an electronic integrated circuit the main device is the transistor. But, in PIC, there is no particular main device that dominates in the fabrication. According to its application, the ranges of fabrication devices are different as the devices that are to be integrated are more than that used in an electronic integrated circuit. The devices ranges from optical amplifiers, filters, low loss-high efficiency interconnect waveguides, detectors, power splitters, modulators and lasers. As different materials are required to fabricate all these devices on a single chip, the procedures and steps become very difficult. But lately researchers have developed methods to make PIC's using resonant photonic interferometry process. Through this method, we can easily develop ultra violet light emitting diodes (LED) in a cost efficient way. With the use of such LED's we can easily overcome optical computing problems.

Photonic Integration Methods

There are mainly two types of photonic integration methods. They are

- Hybrid Photonic Integration and
- Monolithic Photonic Integration

In the case of Hybrid Photonic Integration, the developed integrated IC will be a single package. This package will consist of a number of photonic devices which is used for the same function. Due to this advantage, a lot of IC's are made through this method so as to combine a lot of integrated optic devices.

Applications of Photonic Integrated Circuits

- It is used in fibre-optic communication to make Externally Modulated Lasers (EML) which has a combination of a distributed feedback laser diode and an electro-absorption modulator on a single Indium-Phosphide [InP] chip.
- It has a great application in wavelength division multiplexed (WDM) fiber-optic communication system, where an arrayed waveguide grating (AWG) has to be developed using this technology. AWG is commonly used as optical multiplexers and de-multiplexers.
- Used in biomedical and photonic computing
- Used in Optical sensors and metrology

Predicting Earth Quake Through Data Mining

Kondaru. Ashok Kumar, III-ECE II, Roll No: 198A1A04A9

Data mining consists of evolving set of techniques that can be used to extract valuable information and knowledge from massive volumes of data. Data mining research &tools have focussed on commercial sector applications. Only a fewer data mining research have focussed on scientific data. This paper aims at further data mining study on scientific data. This paper highlights the data mining techniques applied to mine for surface changes over time (eg Earthquake rupture). The data mining techniques help researchers to predict the changes in the intensity of volcano.

This paper uses predictive statistical models that can be applied to areas such as seismic activity or the spreading of fire. The basic problem in this class of systems is dynamic, usually unobservable with respect to earthquake. The space-time patterns associated with time, location and magnitude of the sudden events from the force threshold are observable. This paper highlights observable space time earthquake patterns from unobservable dynamics using data mining techniques, pattern recognition and ensemble forecasting. Thus this paper gives insight on how data mining can be applied in finding the consequences of earthquake and warning the scientific, hence alerting the public.

DATA MINING-DEFINITIONS

• Data mining is defined as an information extraction activity whose goal is to discover hidden facts contained in databases.

• It refers to finding out new knowledge about an application domain using data on the domain usually stored in a database. The application domain may be astrophysics, earth science solar system science.

• It's a variety of techniques to identify nuggets of information or decision making knowledge in bodies of data and extracting these in such a way they can be put to use in the areas such as decision support, prediction ,forecasting and estimation.

DATA MINING GOALS

• Bring together representatives of the data mining community and the domain science community so that they can begin to understand the currents capabilities and research objectives of each others communities related to data mining.
• Identify a set of research objectives from the domain science community that would be facilitated by current or anticipated data mining techniques.
• Identify a set of research objectives for the data mining community that could support the research objectives of the domain science community.

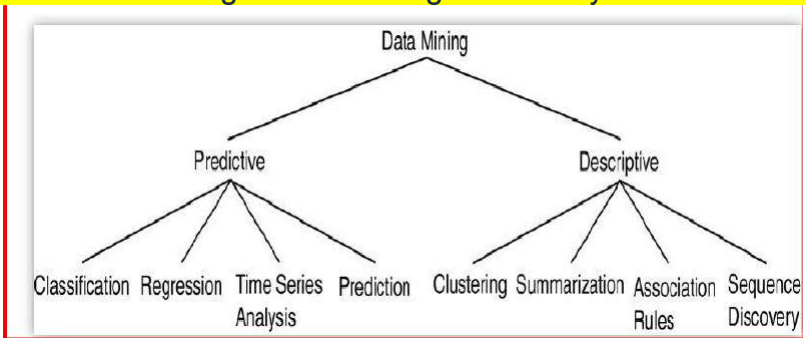
DATA MINING MODELS

Data mining is used to find patterns and relationships in data patterns and relationships in data patterns can be analyzed via 2 types of models.

1. Descriptive models: Used to describe patterns and to create meaningful subgroups or clusters.

2. Predictive models .Used to forecast explicit values, based upon patterns in known results. **This paper focuses on predictive models.

In large databases data mining and knowledge discovery comes in two flavors:



1.Event based mining

• Known events/known algorithms: Use existing physical models (descriptive models and algorithms) to locate known phenomena of interest either spatially or temporally within a large database.

• Known events/unknown algorithms: Use pattern recognition and clustering properties of data to discover new observational (physical) relationships (algorithms) among known phenomena.

• Unknown events/known algorithms: Use expected physical relationships (predictive models, Algorithms) among observational parameters of physical phenomena to predict the presence of previously unseen events within a large complex database.

• Unknown events/unknown algorithms: Use thresholds or trends to identify transient or otherwise unique events and therefore to discover new physical phenomena.

2. Relationship based mining

• Spatial Associations: Identify events (eg astronomical objects) at the same location. (eg same region of the sky)

• Temporal Associations: Identify events occurring during the same or related periods of time.

• Coincidence Associations: Use clustering techniques to identify events that are co-located within a multi-dimensional parameter space.

User requirements for data mining in large scientific databases

• Cross identifications: Refers to the classical problem of associating the source list in one database to the source list in another.

• Cross correlation: Refers to the search for correlations, tendencies, and trends between physical parameters in multidimensional data usually across databases.

• Nearest neighbor identification. Refers to the general application of clustering algorithms in multidimensional parameter space usually within a database.

E-Textiles

Vangapalli. Aravind, III-ECE II, Roll No: 198A1A04C4

E-textiles, also known as electronic textiles, are fabrics that can function electrically as electronics and behave physically as textiles which enable computing ,digital components and electronics to be embedded in them. Part of the development of wearable technology, they are referred to as intelligent clothing or smart clothing that allow for the incorporation of built-in technological elements in everyday textiles and clothes. It does not strictly encompass wearable computing because emphasis is placed on the technology not being visible on the fabric and a computer is not actually embedded into the fabric. While not part of the mainstream form of fashion, its popularity is increasing and more research is being devoted to it.

The field of e-textiles can be divided into two main categories:

1) The first category involves mounting classical electronic devices such as conducting wires, ICs, LEDs and conventional batteries into garments.

2) The second category involves creating electronic function directly on the textile fibers. These functions can either be passive such as pure wires, conducting textile fibers, or more advanced functions such as transistors, diodes and solar cells. The field of embedding advanced electronic components onto textile fibers is sometimes referred to as fibertronics.

The most common approach to e-textiles today comprise the first category, which is technically the most simple approach, and where even a number of commercial products exists such as textiles with incorporated LED components.

There are also a number of research and commercial projects that comprise the use of hybrid structures between category 1 and 2. Here usually a less advanced electronic functions that is embedded into the textile fiber is connected to a classical electronic device or component. Some examples are touch buttons that are constructed completely in textile forms by using conducting textile weaves, and then connected to devices such as music players , or LEDs that are mounted on woven conducting fiber networks to form displays.

Construction of electronic function on textile fibers requires the use of conducting and semi-conducting materials. There are a number of commercial fibers today that include metallic fibers mixed with textile fibers to form conducting fibers that can be woven or sewn. However as both metals and classical semiconductors (such as Si) are stiff material they are not very suitable for textile fiber applications where fibers are subjected to large stretch and bending during use.

Another class of electronic materials which is more suitable for e-textiles is the class of organic electronics materials, (also referred to as conducting plastics, or inherently conducting polymers). As organic electronic materials can be both conducting, semiconducting and designed as inks and plastics, they are more suitable for making electronic fibers.

Some of the most advanced functions that have been demonstrated in the lab to date include:
– organic fiber transistors , this is the first textile fiber transistor that is completely compatible with textile manufacturing and that contains no metals at all.
– Organic solar cell on fibers .

2. BENEFITS OF E TEXTILES

Electronic textiles, or e-textiles, are a new emerging inter disciplinary field of research, bringing together specialists in information technology, microsystems , materials, and textiles. E textiltes offers the following advantages:

– Flexible
– No wires to snag environment
– Large surface area for sensing
– Invisible to others
– Cheap manufacturing

The focus of this new area is on developing the enabling technologies and fabrication techniques for the economical manufacture of large-area, flexible, conformable information systems that are expected to have unique applications for both the consumer electronics and aerospace/military industries.

PROPERTIES OF E – TEXTILES

Electrical properties:

From the electrical points of view, conductivity is the most important factor. Electrical resistance low enough to allow a flow of electric energy, such as for power or data transmission, is critical. Metal, carbon, or optical fibers are typically well-known conductors.

Conductive yarns are either pure metal yarns or composites of metals and textiles. Metals are superior in strength and fineness, and textiles are selected for comfort. In order to produce a successful conductive yarn, the best mix of conductive and non-conductive materials is critical.

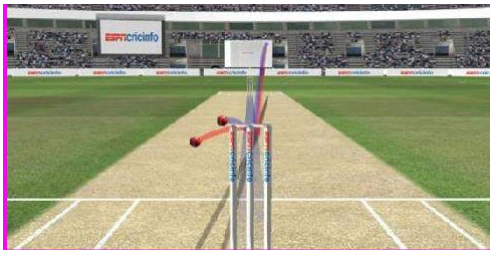
As a thread takes on a bigger portion of conductive components, it loses the typical textile properties such as flexibility or drapability and becomes more conductive. The achievement in electrical resistance has ranged from 0.2441 ohms per meter (Ω/m) to 5,000 Ω/m.

Hawk-eye Technology

Pachava. Balaji, III-ECE II, Roll No: 198A1A04B3

Hawk-Eye is a computer system used in cricket, tennis, snookers and other sports to visually track the path of the ball and display a record of its most statistically likely path as a moving image Hawk-Eye as the most innovative technology provider in sports broadcasting and is a development that will reinforce the group's presence and influence.

• It is primarily used by the majority of television networks to track the trajectory of balls in flight.
• It was developed by engineers at Roke Manor Research Limited of UK in 2001
• A patent was submitted by Dr Paul Hawkins and David Sherry.



Applications

Its applications are mainly in sports
Cricket
Tennis
Snookers and
In some games
Cricket
Used in the third umpire decision(Referral system) At the end of an over, all six deliveries are shown simultaneously to show a bowler's variations such as bounce, speed variations and ball deviation. To view the deviation of the ball from actual track

Advantages

ACCURACY
BENEFICIAL
REDUCES HUMAN EFFORTS

Disadvantages

ERY EXPENSIVE
CHALLENGES UMPIRE'S DECISIONS
NOT HIGHLY PRECISE

Conclusion

This technology has met the high reality and accuracy features. Hawk-Eye is currently developing a system for Football. This technology helps to have correct decisions in any kind of game.

Child Safety Wearable Device

Shaik. Arif, III-ECE II, Roll No: 208A5A0410

This paper discusses the concept of a smart wearable device for little children. The major advantage of this wearable over other wearable is that it can be used in any cellphone and doesn't necessarily require an expensive smartphone and not a very tech savvy individual to operate. The purpose of this device is to help parents locate their children with ease. At the moment there are many wearable in the market which help track the daily activity of children and also help find the child using Wi-Fi and Bluetooth services present on the device. But Wi-Fi and Bluetooth appear to be an unreliable medium of communication between the parent and child.

Therefore, the focus of this paper is to have an SMS text enabled communication medium between the child's wearable and the parent as the environment for GSM mobile communication is almost present everywhere. The parent can send a text with specific keywords such as "LOCATION" "TEMPERATURE" "UV" "SOS" "BUZZ", etc., the wearable device will reply back with a text containing the real time accurate location of the child which upon tapping will provide directions to the child's location on Google maps app and will also provide the surrounding temperature, UV radiation index so that the parents can keep track if the temperature or UV radiation is not suitable for the child.

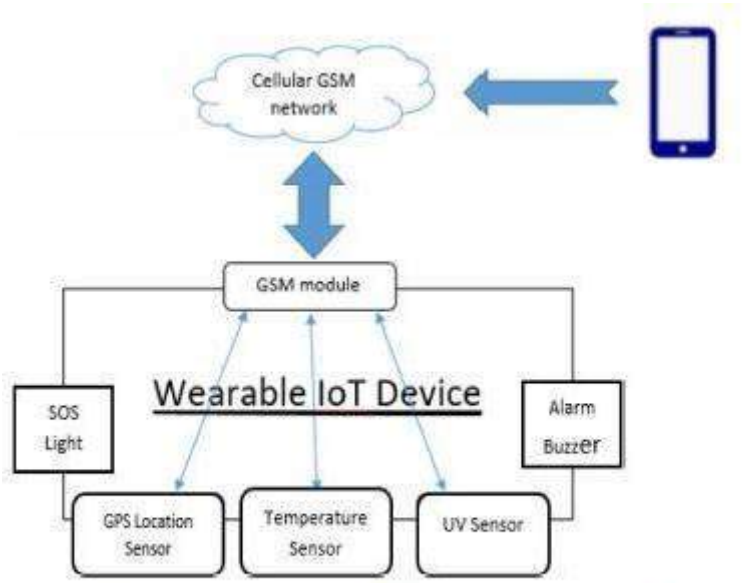


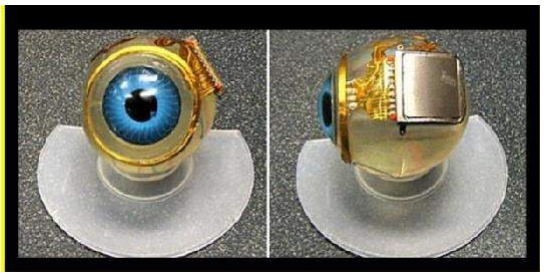
Fig 1. System overview of the wearable device.

The prime motivation behind this paper is that we know how important technology is in our lives but it can sometimes can't be trusted, and we always need to have a secondary measure at hand. The secondary measure used in this project is the people present in the surrounding of the child who could instantly react for the child's safety till the parents arrive or they could contact the parents and help locate them. The secondary measure implemented was using a bright SOS Light and distress alarm buzzer present on the wearable device which when activated by the parents via SMS text should display the SOS signal brightly and sound an alarm which a

bystander can easily spot as a sign of distress. Hence this paper aims at providing parents with a sense of security for their child in today's time.

Artificial Eye

In the current scenario, where over millions of people are affected by visual anomalities, it was with a challenge that this project came into being. It aims at restoring vision to the blind.
Today, high-tech resources in microelectronics, Optoelectronic, computer science, biomedical engineering and also in vitreo retinal surgery are working together to realize a device for the electrical stimulation of the visual system.
Artificial Eye, which works through retinal implants, could restore sight to millions of people around the world who suffer from degenerative eye diseases. This technology is still in its infancy, but has progressed to human trials. This report aims to present a brief overview about the basic aspects of this technology and where it's headed.



What is artificial eye?

An ocular prosthesis or artificial eye is a type of craniofacial prosthesis that replaces an absent natural eye following an enucleation, evisceration, or orbital exenteration. The prosthesis fits over an orbital implant and under the eyelids.

How eyes work?

The light coming from an object enters the eye through cornea and pupil. The eye lens converges these light rays to form a real, inverted and diminished image on the retina. The light sensitive cells of the retina get activated with the incidence of light and generate electric signals. These electric signals are sent to the brain by the optic nerves and the brain interprets the electrical signals in such away that we see an image which is erect and of the same size as the object.

The eye

the main part in our visual system is the eye. Our ability to see is the result of a process very similar to that of a camera. A camera needs a lens and a film to produce an image. In the same way, the eyeball needs a lens (cornea, crystalline lens, vitreous) to refract, or focus the light and a film (retina) on which to focus the rays. The retina represents the film in our camera. It captures the image and sends it to the brain to be developed.

BIOCHIP

N. Sravani, III-ECE II, Roll No: 198A1A0486

The first biochip was invented by an American company namely Affymetrix, and the product of this company is GeneChip (DNA microarrays). These products comprise the number of individual DNA sensors used for sensing defects. Biochip plays an essential role in the field of biology research like systems biology as well as disease biology while the number of clinical applications is rising. It is a set of microarrays which are placed on a strong surface of a substrate to allow thousands of reactions to be performed in less time. The development of biochip mainly includes the combination of molecular biology, biochemistry, and genetics. Biochips are used for analyzing organic molecules connected with a live organism. This article discusses what is Biochip, types, biochips and their uses, disadvantages, and its applications.

What is a Biochip?

A biochip is a set of diminished microarrays that are placed on a strong substrate that allows many experiments to be executed at the same time to obtain a high throughput in less time. This device contains millions of sensor elements or **biosensors.** Not like microchips, these are not electronic devices. Each and every biochip can be considered as a microreactor that can detect a particular analyte like an enzyme, protein, DNA, biological molecule or antibody. The main function of this chip is to perform hundreds of biological reactions in a few seconds like decoding genes (a sequence of DNA).

Working Principle of a Biochip:

The working of Biochip mainly includes the following steps.

1. Step1: The operator generates a low-power electromagnetic field through radio signals
2. Step2: The fixed biochip gets turn on
3. Step3: The activated chip transmits the identification code reverse to the operator through radio signals
4. Step4: Reader strengthens the received code to change it into digital form and finally exhibits it on LCD.

Components of BioChips

The Biochip comprises two components namely the transponder as well as reader.

1)Transponder

Transponders are two types' namely active transponder and passive transponder. This is a passive transponder which means that it doesn't contain any of its own energy or battery whereas in passive, it is not active until the operator activates it by giving it a low electrical charge. This transponder consists of four parts such as antenna coil, computer microchip, glass capsule, and a tuning capacitor.

- The computer microchip stores a unique identification (UID) number that ranges from 10 digits to 15 digits long.
- The antenna coil is very small, primitive and this type of ***antenna*** is used to send and receive the signals from the scanner or reader.
- The charging of the tuning capacitor can be done with the small signal i.e, 1/1000 of a watt which is sent by the operator.

- The glass capsule holds the **antenna coil,** capacitor**, and microchip**, and it is made with a biocompatible material namely soda lime glass.

2) Reader

The reader comprises of a coil namely "exciter" and it forms an electromagnetic field through radio signals. It offers the required energy (<1/1000 of a watt) to activate the biochip. The reader carries a receiving coil for receiving the ID number or transmitted code sent back from the excited implanted biochip.

Types of BioChips

There are three types of Biochips available namely DNA microarray, microfluidic chip, and protein microarray.

1) DNA Microarray

A DNA microarray or DNA biochip is a set of tiny DNA spots fixed to a strong surface. A researcher utilizes to calculate the expression levels for a large number of genes. Every DNA mark comprises picomoles of particular genes which are termed as probes. These can be a short segment of a genetic material under high rigidity situations. Usually, probe-target hybridization is noticed and counted by recognition of fluorophore or chemiluminescence labeled targets to decide the relative quantity of nucleic acid series in the target. Innovative arrays of nucleic acid were macro arrays about 9 cm X 12 cm and the initially automated icon based analysis was published in the year 1981.

2) Microfluidic Chip

Microfluidic biochips or lab-on-a-chip are a choice to usual biochemical laboratories and are transforming several applications like DNA analysis, molecular biology procedures, proteomics which is known as the study of proteins and diagnostic of diseases (clinical pathology). These chips are becoming more complex by using 1000's of components, but those components are designed physically called as bottom-up full-custom plan, which is a very large workforce.

3) Protein Microarray

A protein microarray or protein chip method is used to follow the actions as well as connections of proteins, and to find out their function on a large scale. The main advantage of protein microarray is that we can track a large number of proteins in parallel. This protein chip comprises of a surface for supporting like microtitre plate or bead, nitrocellulose membrane, the glass slide. These are automated, rapid, economical, very sensitive, consumes less quantity of samples. The first methodology of protein chips was introduced in antibody microarrays of scientific publication in the year 1983. The technology behind this chip was quite easy to develop for DNA microarrays, which have turned into the most generally used microarrays.

TELUGU ARTICLES

చిందే స్వేదం 'స్వర్గం'

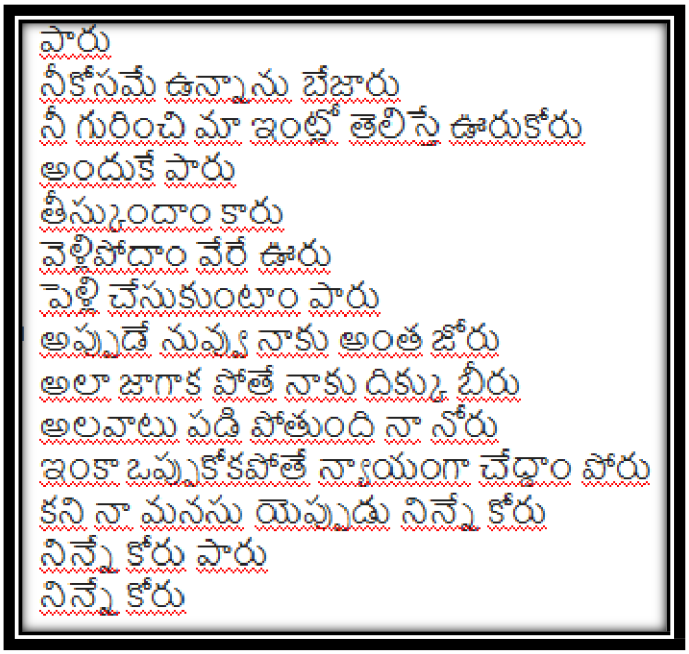
వాళ్ళతో
రాళ్లు మాట్లాడతాయి
చెమటలో తడుస్తూ
ఆకలి కోసం ఆఖరి దాకా
లోకం కోరిక తీరేదాకా ...

మట్టి మళ్ళు నడుమ నలిగి
ముక్కలై మెలుగుతుంది
బక్కోళ్లకు అండగా
ఉన్నోళ్ళకు అందంగా
పనికి రెండు కళ్ళు పలుగూ పారా
చిందే స్వేదం స్వర్గం
శ్రమ దారిలో
పొంగే గమ్యం సుఖం...

కష్టం ఎగిసిపడుతుంది
కునుకు లేని కళ్ళ వీధిలో
కథలు నడిచేలా కలలు పండేలా
వాళ్లే
శ్రమతో లోకాన్ని బతికించే
బలహీనులు శ్రమజీవులు
కష్టంతో సుఖాన్ని సృష్టించే
సామాన్యులు కష్టజీవులు ..

K.Rajesh
IIIrd ECE-II
208A5A0409

N.Mahesh Babu
IIIrd ECE-I

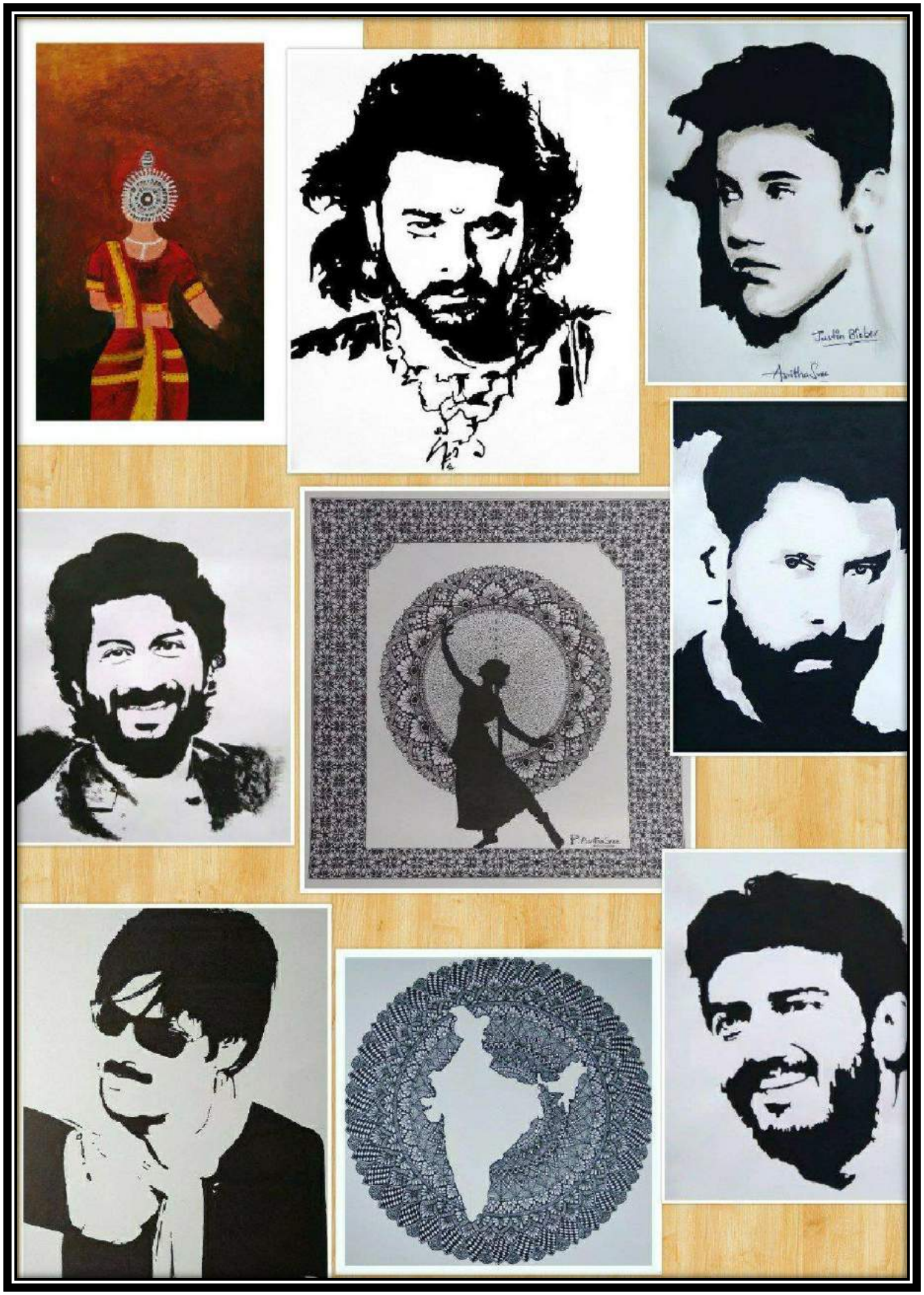


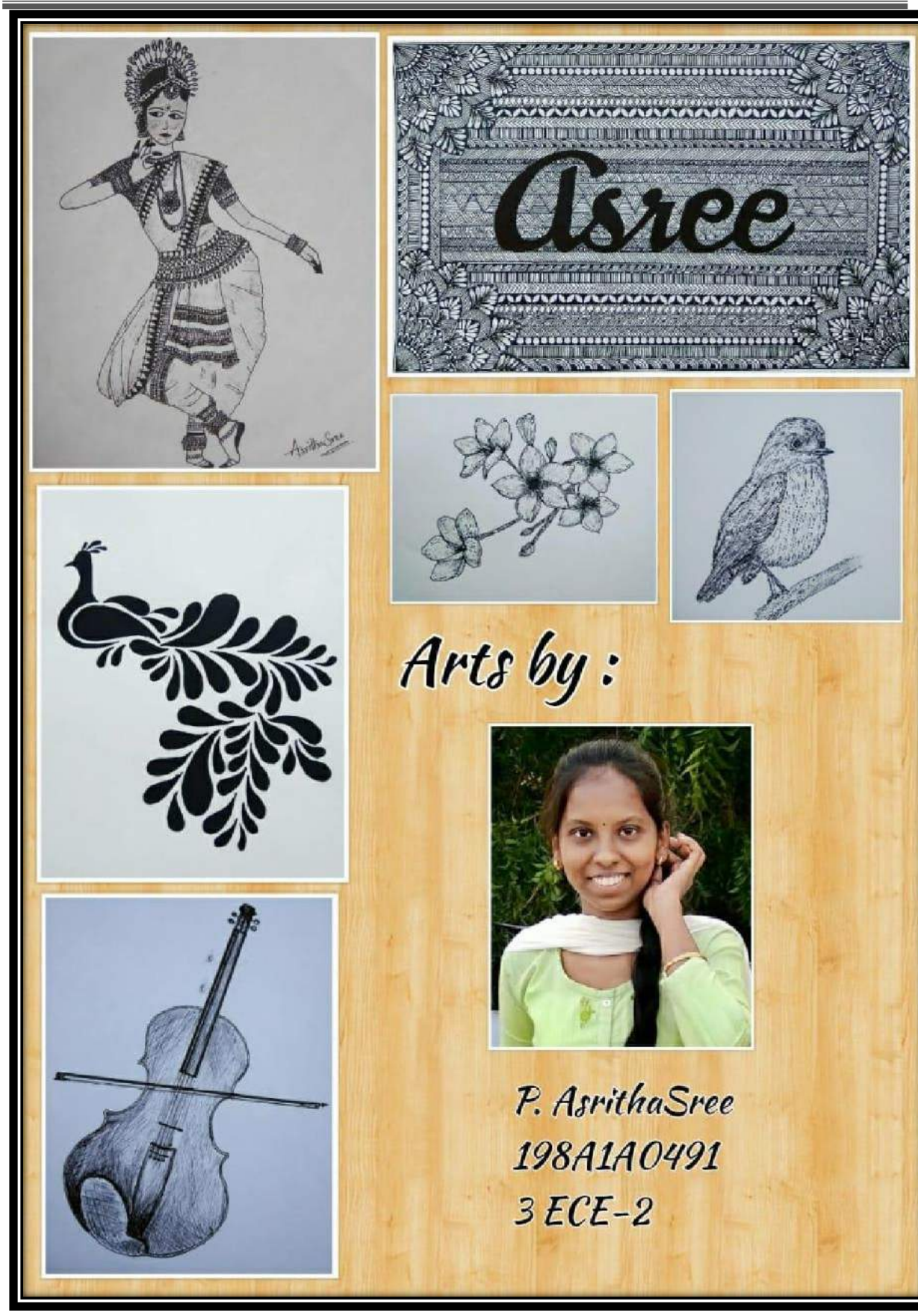
Balaji Patchava
IIIrd ECE-II

PAINTINGS

A BUDDING ARTIST:

My name is P. Arsritha sree studying 3 rd B.tech in the specialization of ECE .From my child hood , I am very keen about arts .Art is a wide range of human activities that involves creative imagination and an aim to express beauty , emotional power or conceptual ideas It is a technique of producing images on an surface , usually a paper by means of ink, graphite or crayons. Drawing as formal artistic creation might be defined as the primarily linear rendition of objects the visible world ,as well as of concepts , thoughts, attitudes , emotions and fantasies Here are some of my stencil portraits, coloured pencil arts ,pen arts ,mandala art and line arts.


Justin Bieber

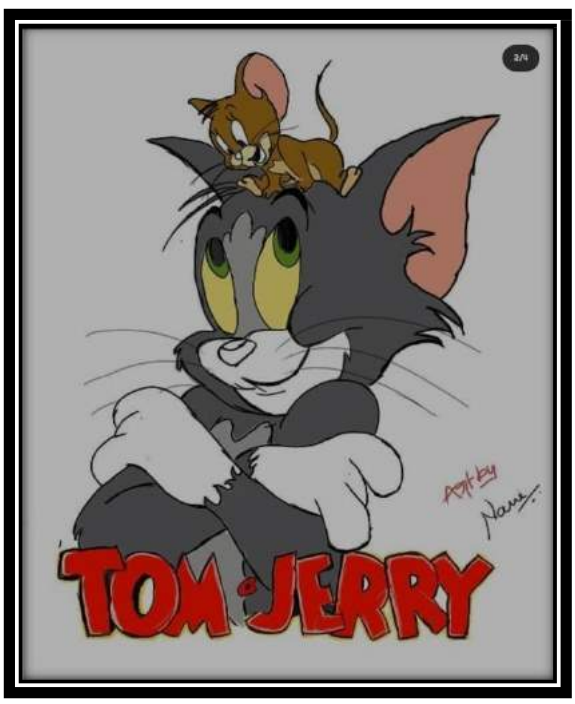

Asree
Arts by :
P. AsrithaSree
198A1A0491
3 ECE-2

DIGITAL PAINTING:

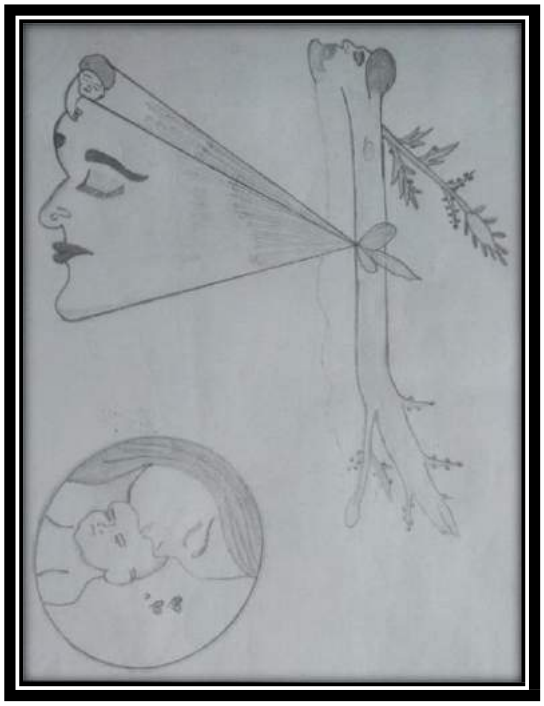
A **sketch** (ultimately from Greek – *schedios*, "done extempore" is a rapidly executed freehand drawing that is not usually intended as a finished work. A sketch may serve a number of purposes: it might record something that the artist sees, it might record or develop an idea for later use or it might be used as a quick way of graphically demonstrating an image, idea or principle. Sketching is the most inexpensive art medium.

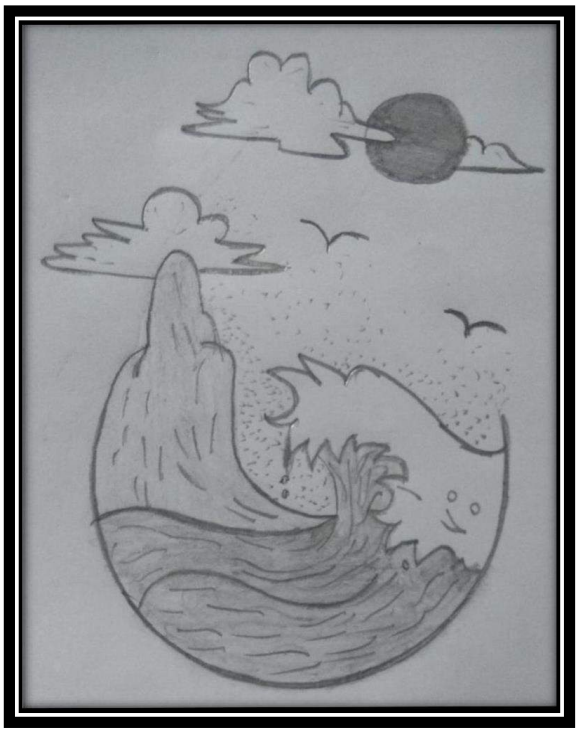
Sketches can be made in any drawing medium. The term is most often applied to graphic work executed in a dry medium such as silverpoint, graphite, pencil, charcoal or pastel. It may also apply to drawings executed in pen and ink, digital input such as a digital pen, ballpoint pen, marker pen, water colour and oil paint. The latter two are generally referred to as "water colour sketches" and "oil sketches". A sculptor might model three-dimensional sketches in clay, plasticine or wax.

For me Its Not JOB or INCOME SOURCE .Its A Stress buster To me.When is was fell stressed or Any mental Tensions, I Make Skeytch to Dirvert To the mood.



Art By:
S.Narendra
208A5A0412
III RD YEAR ECE-II





N. ANANTHA LAKSHMI,
198A1A0428
3RD YEAR, ECE-1.

Art By:
K.Aravind
208A5A0408

Art By:
R.Charishma Lakshmi,
198A1A0435, III ECE-I

Art By:
K.N.S.Asa Kamala,
198A1A0415, III ECE-I

PHOTOGRAPHY

Photography is the art, application, and practice of creating durable images by recording light, either electronically by means of an image sensor, or chemically by means of a light-sensitive material such as photographic film.

Photography is a way to express your ideas for others to see. There is no way to deny that life files by...

“Photography is a love affair with life.” My photography is the result of being there at a right moment. The picture that you took with your camera is the imagination you want to camera with reality the camera is an excuse to be someplace you otherwise don’t belong. we love photography because of the exciting moments.

Photography is the perfect way to preserve ones important milestones... Photography is a beautiful experience. Not only we have the opportunity to provide a memorable experience, but we also get to connect with people in a fun way.

We take the photos as ticket to the moment otherwise gone.

“When words become unclear, I shall focus with photographs. When images become in a adequate, I shall be content with silence. ..”

Photography by
P.VYSHNAVI
198A1A0488
3RD YEAR, ECE-2.

Photography by:
N.Mahesh Babu,
198A1A0454
3RD YEAR, ECE-1





Photography by:
K.N.S.Asa Kamala,
198A1A0415
3RD YEAR, ECE-1

EVENTS

A one week national level online FDP on VERILOG HDL FOR FPGA & EMBEDDED APPLICATINS organized by the ECE department. The resource person is- Mr.M.Madan Gopal , corporate trainer & placement consultant at star VLSI Services pvt.ltd. Bangalore.

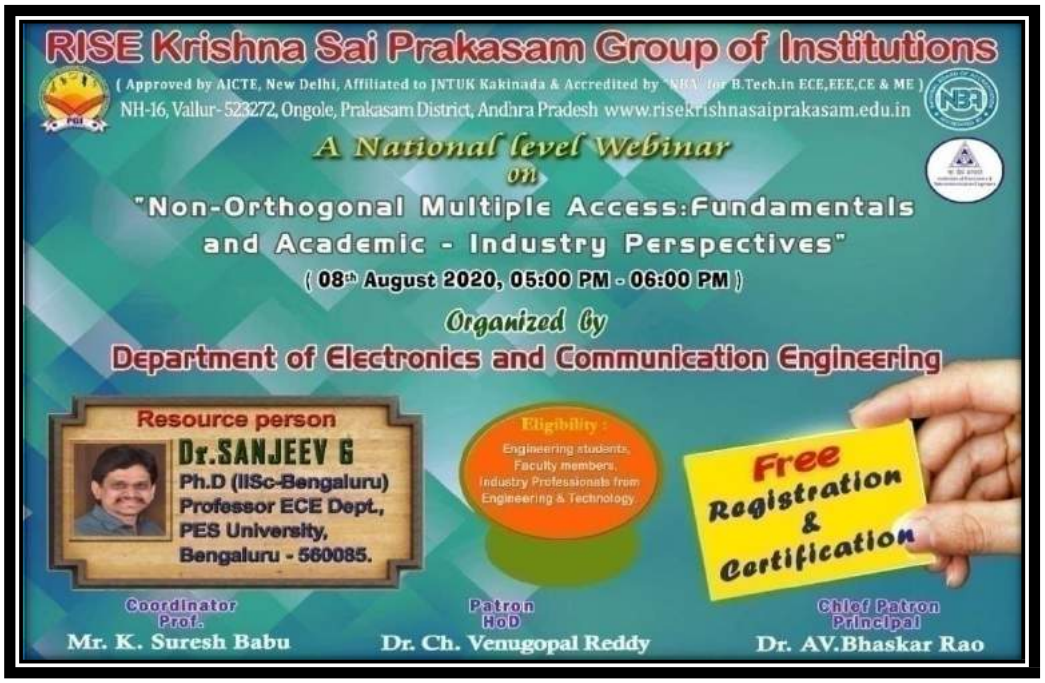
A one week national level online FDP on PRINCIPLES OF MODERN RADAR organized by the ECE department. The resource person is- Dr. P.Sridhar, Associate Professor, ECE Department, NIT, Surathkal.

A National level webinar on IMPORTANCE OF LEADERSHIP FOR ENGINEERING STUDENTS FOR BETTER CAREER PURSUITS organized by the ECE department. The resource person is- Dr. V.Srinivas Ckravarty, Professor, Dept. of Biotechnology, IIT, Madras.

A one day national level webinar on JOB OPPORTUNITIS IN CORE ECE organized by the ECE department. The resource person is- Mr.M.Madan Gopal , corporate trainer & placement consultant at star VLSI Services pvt.ltd. Bangalore.

A 3 day National level FDP on Various Research Opportunities In Electronics And Communication Engineering from 01st to 3rd July 2020, organized by the ECE department.

A National level Webinar on "Non-Orthogonal Multiple Access: Fundamentals and Academic – Industry Perspectives" by the ECE department. The resource person is- Dr. Sanjeev G, Professor, ECE Department, PES University, Bengaluru.



A two day National Level Webinar on "Computer Vision and Image Processing – Industrial Scope from 13th to 14th July 2020" organized by the ECE department. The resource person is- Dr. Karthik Seemakurthy, Research Scientist, TCS Innovation and Research Labs, Bengaluru.

Staffers' Grand Gathering (It's the party time for collective merriment) conducted by Rise Krishna Sai Group Of Institutions on 27th January ,2021.

Prinipal's Speech and dance performance by higher officials' on Staffers' Grand Gathering party

Watching dance performance by higher officials' on Staffers' Grand Gathering party

Watching dance performance by staff on Staffers' Grand Gathering party

Watching dance performance by staff on Staffers' Grand Gathering party

Vaccination Drive conducted on 24-08-2021 by NSS UNIT of Rise Krishna Sai Group Of Institutions, Ongole, Prakasam (Dt).

Vaccination taking by girls

Fusion 2020-21 on 27th February conducted by Rise Krishna Sai Group Of Institutions, Ongole, Prakasam (Dt).

Stalls on Fusion 2020-21

Stall Members :

- **S.Narendra** **IInd ECE-II**
- **SK.Arif** **IInd ECE-II**
- **T.Sreenu** **IInd ECE-II**
- **SK.Asif** **IInd ECE-II**
- **K.Ashok Kumar** **IInd ECE-II**

Stall by II ECE girls on Fusion 2020-21

Dance Performance on Fusion 2020-21

Prize Distribution on Fusion 2020-21

CRT Class attended by II ECE-II students on 05th March-2021

CRT Class conducted by S. Arun Kumar (a trainer)

CRT Class attended by II ECE-I students on 05th March-2021

II ECE-I students With CRT Class Trainer S. Arun Kumar

6th March-2021 by II ECE-II Students

Elocution on 06th March-2021 by II ECE-II Students

RISE CodeTantra conducted by Rise Krishna Sai Group Of Institutions, Ongole, Prakasam (Dt).

The RISE Krishna Sai Group of Institutions chairman Sidda Venkateswara Rao announced that they are introducing a tool, Code Tantra for the first time to students to practice software coding effectively. The CEO of Code Tantra, TSV Ramana said the tool is the best platform to improve their coding skills. He said that the student can log into their account from anywhere and continue the practice of coding.

They said that as part of their efforts to provide the best teaching facilities, they introduced a new 250 computer lab in the college. The noted writer Yandamuri Veerendranath also appreciated the college for their concern towards the career of the students. The college director AV Bhaskara Rao, principal Dr KV Subrahmanyam, Professor JV Raman, and HoDs of various departments also participated in the programme.

Prize Distribution by Principal Sir

2021 freshers' party conducted by Rise Krishna Sai Group Of Institutions, Ongole, Prakasam (Dt).

Watching the arrangements by Principal sir

A Skit on freshers' party by freshers

Dance Performance on freshers' party by freshers

Dance Performance on freshers' party by Aravind and Anji IInd ECE

Dance Performance on freshers' party by Aravind and Anji IInd ECE

Flash mob Performance on freshers' party by IInd ECE girls

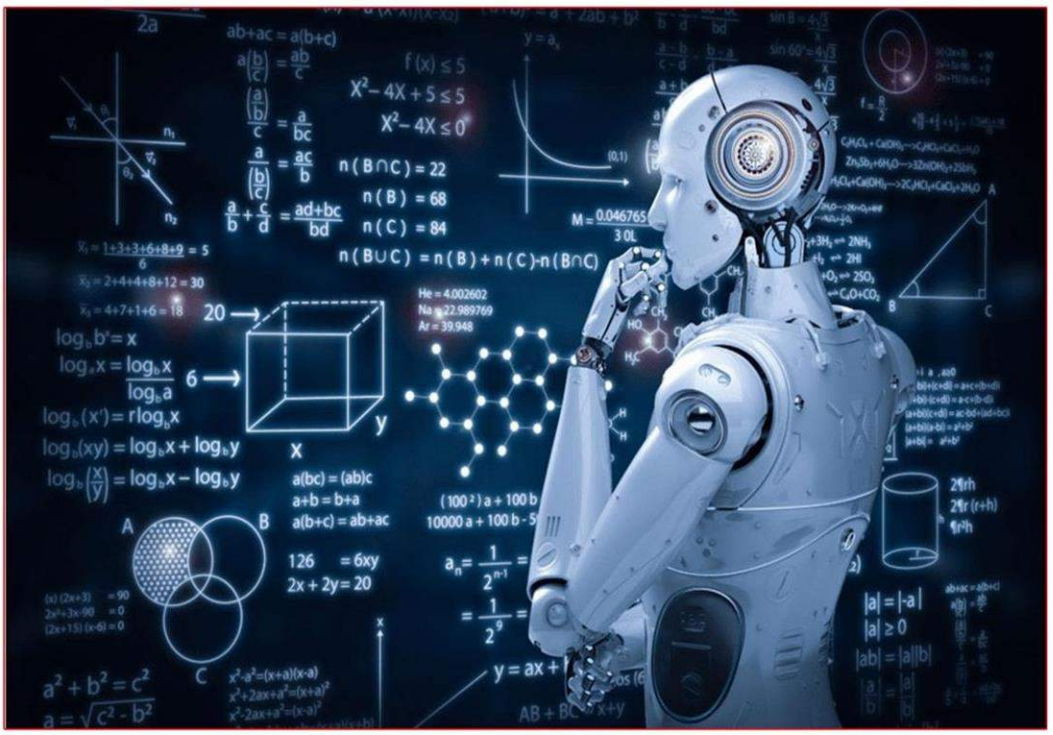
PLACEMENTS :

Year	Name of student placed and contact details	Program graduated from	Name of the employer with contact details
2020-21	B. Bindu	ECE	TCS, Telangana
2020-21	Bandlapalli Shilpa	ECE	ALLSEC TECHNOLOGIES,Tamil Nadu
2020-21	Bollepaka Harika	ECE	SUTHERLAND GLOBAL SERVICES, Tamil Nadu
2020-21	DASU HEPSIBA	ECE	ALLSEC TECHNOLOGIES,Tamil Nadu
2020-21	G. V. S. Suma	ECE	INFOSYS ,Karnataka 560100
2020-21	Sravanthi Gunturu	ECE	ACCENTURE , Karnataka 560066
2020-21	Chandhaluri Manasa Ramya	ECE	FOXCONN,City, Andhra Pradesh 517646
2020-21	Dhana lakshmi Bojja	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	K.Sireesha	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Kotha Aravinda Namrutha	ECE	ALLSEC TECHNOLOGIES,Velachery Main Rd, Nehru Nagar, Velachery, Chennai, Tamil Nadu 600042
2020-21	G. Bhuvaneswari	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	Vishalakshi Maddireddy	ECE	REPHERRALS SOFTWARE SOLUTIONS , cybertowers, Hyderabad, Telangana 500081
2020-21	Malisetty Vns Mahalakshmi	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Sri Ranganayaki Mamidi	ECE	PWC, Pine Valley 4th Floor Intermediate Ring Road, Village, Embassy Golf Links Business Park, Challaghatta, Bengaluru, Karnataka 560071
2020-21	Mannepalli Akhila	ECE	QSPIDERS,Metro station, QSpiders 2nd floor, No.222/MIG, Rd number 2 KPHB Phase 1, near KPHB, Kukatpally, Hyderabad, Telangana 500072
2020-21	Meda sai sravani	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Menda sireesha	ECE	ACCENTURE ,Commerzone (ILC Plot No75/76/85 to 87 C.A Plot & Plot No 88, EPIP Zone, Whitefield, Bengaluru, Karnataka 560066
2020-21	Asritha Nandanavanam	ECE	MY SLATE / SIX PHARSE ,chennai
2020-21	Nuthalapati Swapna	ECE	REPHERRALS SOFTWARE SOLUTIONS , cybertowers, Hyderabad, Telangana 500081
2020-21	Tejaswi Sure	ECE	QSPIDERS,Metro station, QSpiders 2nd floor, No.222/MIG, Rd number 2 KPHB Phase 1, near KPHB, Kukatpally, Hyderabad, Telangana 500072
2020-21	Syed Ruhee Afroz	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Geetha Madhuri Tanguturi	ECE	PARAGON DIGITAL, Advertising agencyTyche Towers, MGR Nagar, 734, MGR Main RdOpen · Closes 12AM · 044 4017
2020-21	Lakshmi Thirupathamma Thatikonda	ECE	SUTHERLAND GLOBAL SERVICES, Gateway Office Parks, A6, 6th Floor, A1, GF, 5th, 6th, B2 Block, 16, Grand Southern Trunk Rd, Perungalathur, Tamil Nadu 600063
2020-21	V. Sai Swetha	ECE	SUTHERLAND GLOBAL SERVICES, Gateway Office Parks, A6, 6th Floor, A1, GF, 5th, 6th, B2 Block, 16, Grand Southern Trunk Rd, Perungalathur, Tamil Nadu 600063
2020-21	V. Ajitha	ECE	SUTHERLAND GLOBAL SERVICES, Gateway Office Parks, A6, 6th Floor, A1, GF, 5th, 6th, B2 Block, 16, Grand Southern Trunk Rd, Perungalathur, Tamil Nadu 600063
2020-21	B.Saran Deepak	ECE	QSPIDERS,Metro station, QSpiders 2nd floor, No.222/MIG, Rd number 2 KPHB Phase 1, near KPHB, Kukatpally, Hyderabad, Telangana 500072
2020-21	K.kavya	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	K.Raghaveni	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	Karthik Gurram	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Saimukesh jonnadula	ECE	ACCENTURE ,Commerzone (ILC Plot No75/76/85 to 87 C.A Plot & Plot No 88, EPIP Zone, Whitefield, Bengaluru, Karnataka 560066
2020-21	syed Afreed	ECE	QSPIDERS,Metro station, QSpiders 2nd floor, No.222/MIG, Rd number 2 KPHB Phase 1, near KPHB, Kukatpally, Hyderabad, Telangana 500072
2020-21	Kancharla sahithi	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646

2020-21	Satish Talari	ECE	ACCENTURE ,Commerzone (ILC Plot No75/76/85 to 87 C.A Plot & Plot No 88, EPIP Zone, Whitefield, Bengaluru, Karnataka 560066
2020-21	Sahithi Appala	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	B.Saranya	ECE	SUTHERLAND GLOBAL SERVICES, Gateway Office Parks, A6, 6th Floor, A1, GF, 5th, 6th, B2 Block, 16, Grand Southern Trunk Rd, Perungalathur, Tamil Nadu 600063
2020-21	Ch Saikeerthi	ECE	ALLSEC TECHNOLOGIES,Velachery Main Rd, Nehru Nagar, Velachery, Chennai, Tamil Nadu 600042
2020-21	Meghana Gera	ECE	ALLSEC TECHNOLOGIES,Velachery Main Rd, Nehru Nagar, Velachery, Chennai, Tamil Nadu 600042
2020-21	Koppolu Keerthana	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	G Rajya lakshmi	ECE	PWC, Pine Valley 4th Floor Intermediate Ring Road, Village, Embassy Golf Links Business Park, Challaghatta, Bengaluru, Karnataka 560071
2020-21	Kolli Nagalakshmi	ECE	REPHERRALS SOFTWARE SOLUTIONS , cybertowers, Hyderabad, Telangana 500081
2020-21	Kutala.pavani	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	M. Prameela	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	K. Hemalatha	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Kummitha Kavya	ECE	NIHON TECHNOLOGIES,Elnet Software City, Module 14, 1st floor, TS 140 Block, 2&9, Old Mahabalipuram Rd, Tharamani, Chennai, Tamil Nadu 600113
2020-21	K. Lakshmi pravallika	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Shabna Mohammad	ECE	ALLSEC TECHNOLOGIES,Velachery Main Rd, Nehru Nagar, Velachery, Chennai, Tamil Nadu 600042
2020-21	Madhuri Palnati	ECE	KPIT,9 RMZ 5D Building, Bellandur - Doddakannelli Rd, Devarabisanahalli, Bellandur, Bengaluru, Karnataka 560103
2020-21	Sd.Aishabanu	ECE	SUTHERLAND GLOBAL SERVICES, Gateway Office Parks, A6, 6th Floor, A1, GF, 5th, 6th, B2 Block, 16, Grand Southern Trunk Rd, Perungalathur, Tamil Nadu 600063
2020-21	Chenikala.Nagaraju	ECE	SINTAX BRIGHT AUTO PLAST,Tamil Nadu 602117
2020-21	Vasundhara	ECE	REPHERRALS SOFTWARE SOLUTIONS , cybertowers, Hyderabad, Telangana 500081
2020-21	N.L.N.S Alekhya	ECE	ACCENTURE ,Commerzone (ILC Plot No75/76/85 to 87 C.A Plot & Plot No 88, EPIP Zone, Whitefield, Bengaluru, Karnataka 560066
2020-21	Adikesavulu Mitnala	ECE	EOS No: 11, 2nd Floor, Tech tower,OMR, Thoraipakkam, Chennai – 600097
2020-21	Meeniga Kasinaidu	ECE	EOS No: 11, 2nd Floor, Tech tower,OMR, Thoraipakkam, Chennai – 600097
2020-21	Gattupalli Ravisankar	ECE	EOS No: 11, 2nd Floor, Tech tower,OMR, Thoraipakkam, Chennai – 600097
2020-21	Midasala Bhavana	ECE	EOS No: 11, 2nd Floor, Tech tower,OMR, Thoraipakkam, Chennai – 600097
2020-21	Kallagunta Narmada	ECE	EOS No: 11, 2nd Floor, Tech tower,OMR, Thoraipakkam, Chennai – 600097
2020-21	Ravuri Pooja	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	SHAIK AYESHA	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	T. Venkata Rajeswari	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	Yeruva Lakshmi Prasanna	ECE	FOXCONN,Ready Built Factory 5, 380, Belerica Road, Sri City, Andhra Pradesh 517646
2020-21	Linga Reddy Sumanjili	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Thanuja Ramala	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Mannem Sravani	ECE	INFOSYS ,Plot No, 44, Hosur Rd, Konappana Agrahara, Electronic City, Bengaluru, Karnataka 560100
2020-21	Vishalakshi Maddireddy	ECE	NIHON TECHNOLOGIES,Elnet Software City, Module 14, 1st floor, TS 140 Block, 2&9, Old Mahabalipuram Rd, Tharamani, Chennai, Tamil Nadu 600113
2020-21	Gali Vamsi Krishna	ECE	FISERVE,Trion Business Park, Nagar Rd, Kargil Vijay Nagar, Wadgaon Sheri, Pune, Maharashtra 411014

PLACEMENTS OF 2020-21

Total 65 students have got the placements in various established companies from ECE branch in the academic year of 2020-21.



DEPARTMENT OF

ELECTRONICS AND COMMUNICATION ENGINEERING

ELECOMM 2K20

RISE KRISHNA SAI PRAKASAM GROUP OF INSTITUTIONS :: ONGOLE

(APPROVED BY AICTE-NEW DELHI, AFFILIATED TO JNTUK KAKINADA)

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