

FROM OUR DIRECTOR

“This Newsletter is the result of your confidence, creativity and Innovation. Digital media has seen tremendous growth and It has opened up multiple new possibilities. I am particularly happy that this communication will establish a tread of acquaintance with our Alumni. I congratulate the whole team and hope that this will prove to be a milestone in the digital journey of ECE Department”.

-Dr. E. Sai Baba Reddy, Director, VJIT



FROM OUR PRINCIPAL



“This Newsletter creates a great feeling to learn about the initiative taken by the ECE Department to facilitate the students with necessary information and keeping the records. This Newsletter has initiated something that will continue to help and guide present and upcoming students of the ECE Department”.

-Dr. A. Padmaja, Principal, VJIT

FROM OUR HOD

“Sampada throws limelight on the efforts sown and reaped over the last six months of the department. The department aims to offer exemplary education through modern tools and make students to follow ethics to lead a life beneficial to the society. The Newsletter showcases the skills acquired to enhance the capability of both students and staff for the dynamic demands of the Society. Looking forward to have support for further activities”.

-Dr K. Vasanth, Head of the Department



DEPARTMENT

VISION OF THE DEPARTMENT

The department of Electronics and Communication Engineering intends to be a leader in creating the high quality engineers in the field of electronics and associated technologies to cater national and global technological needs providing the human prosperity and well-being.

MISSION OF THE DEPARTMENT

M1 – Providing an infrastructural and conducive environment to the students, faculty and researchers for attaining domain knowledge and expertise in Electronics and Communication Engineering.

M2 – Enable the students to develop into outstanding professionals with high ethical standards capable of creating, developing and managing global engineering enterprises.

M3 – Inculcate the spirit of lifelong learning by interacting with outside world and communication skills.

DEPARTMENTAL ACTIVITIES

The Department of Electronics and Communications Engineering takes immense pride in enhancing the way the faculty and students learn, interact and support each other in shaping the future through remarkable skills and innovations incubated at our department by inculcating various activities at the department.

The Department of ECE has added several feathers to its hat and hosted several activities throughout the year.

WEBINARS THROUGH IETE STUDENTS FORUM

- 1 Career Opportunities after graduation on 29th January 2021 by Mr S Mani Mohan Trinath, GATE/ESE Trainer.
- 2 Recent Trends in Electronics with Career Guidance on 26th May 2021 by Ms Geetha Gubbala, VLSI frontend Trainer, Project Developer and Director AGM Techviz, Hyd.
- 3 Drone Design on 28th May 2021 by IIT Hyderabad Team by Dr G V V Sharma, Associate Professor, IIT Hyd.
- 4 Industrial Career Scope Awareness with Core Fields on 1st June 2021 by Ms Geetha Gubbala, VLSI frontend Trainer, Project Developer and Director AGM Techviz, Hyd.
- 5 Smart UV Disinfection Device during Covid-19 Pandemic on 29th May 2021 by Dr S Arun Metha, Associate Professor, ECE, KLEF, Deemed to be University.
- 6 Design and Simulation of a network using Cisco Packet Tracer on 4th June 2021, by Mr K L Lokesh, Assistant Professor, ECE, Certified CCNA Instructor, VJIT.

IEEE EVENTS

Many Events have been organized under IEEE which have helped students in learning new technologies. Speakers with high intellect and experience have played an important role in reducing the bridge between Institute and Industry.

The following are the Events organized under IEEE

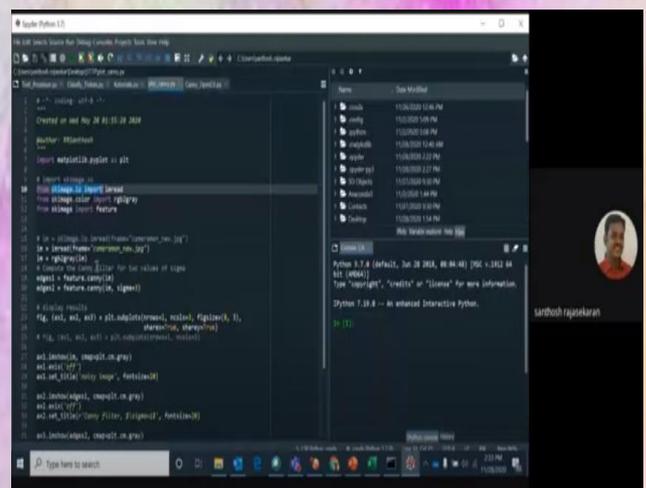
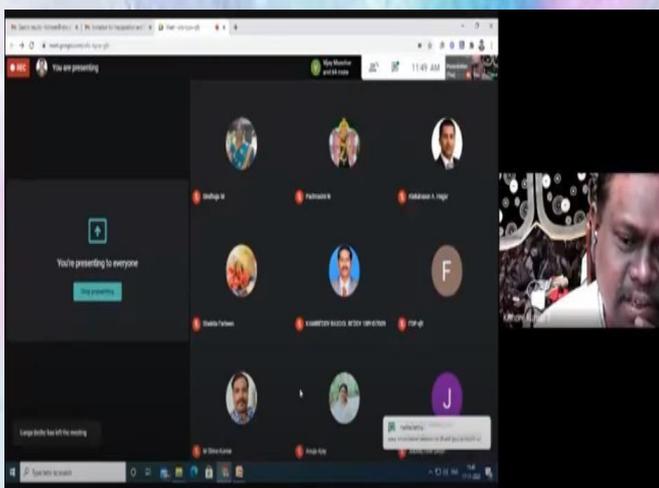
1. Advanced Python & Deep Learning (PyTorch) on 12th - 15th Jan 2021
Speaker of the Event – Dr J R Ravindra, Professor, Vardhaman Engineering College
2. Artificial Intelligence – Computer Vision on 13th March 2021
Speaker of the Event – Dr Niranjana Prasad, Scientist, DLRL.
3. Importance of Embedded Systems & ARM Processors on 8th – 11th Sep 2020
Speaker of the Event – Dr P Satish, Professor, CBIT.

FDP EVENT

Two Week faculty program on Implementation of Artificial Intelligence for Solving Digital Signal and Image Processing Problems sponsored by AICTE and conducted By Dr P Ganesan through online mode.

This FDP introduced fundamental concepts of Artificial Intelligence aiming to achieve

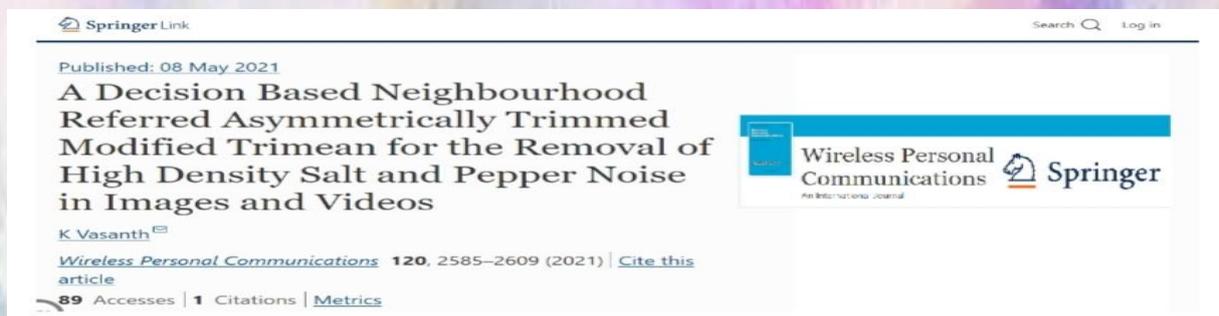
1. Emerging technologies in the areas of AI.
2. Solutions for real world problems using AI.
3. The knowledge on soft computing techniques to simulate digital Signal and image processing applications.



DEPARTMENT NEWS

PAPER PUBLICATIONS

1. Abdul Ali and M Vadivel had published a research article titled “Pegasus Double Cluster Head Hybrid Congestion Control in wireless sensor networks” in Journal of Communication Software and Systems.
2. K Vasanth had attended International conference on Advances in signal processing and communication Engineering (ICASPACE-2021) and presented a paper titled “Content based non- linear filter for the removal of impulsively modelled artifacts from images and videos with sprinter.
3. J Sridevi had attended International Conference and presented her work on the Impact of Distance Measure on Kriging Interpolation on natural image corrupted by dropout noise
4. Sai Krithik, V Adarsh, T Pratyusha and K Vasanth had Attended conference proceedings of SPIE on the “ Use of Deep Learning in Transport services for maintaining safety and regulating unauthorized drivers”.
5. M Rajendra Prasad had attended International Conference on Emerging Trends in Circuit Branch Technologies and applications ETCTA 2021 on the topic of Trust Computational methodology for an Internet of Things and received the best Research paper Award for the same.



Dr K Vasanth had published a research article in Science citation Indexed and Scopus Indexed Journal titled “Wireless Personal communications” with an Impact Factor of 1.2

STAFF CERTIFICATIONS

1. G Ravi Kishore had attended 5 Day FDP on Quantum Computing at Atal Academy
2. A Laxman had attended 6 Day FDP on Artificial Intelligence in Electronic chip Design Technology and Machine Learning at ACE Engineering College.
3. A Jayalakshmi had attended 6 Day FDP on Data Science in Engineering Applications at Anurag Group of Institutions, TS.
4. J Sridevi had attended 6 Day FDP on Machine Learning for all and Wireless Sensor using NS2 at KSRM College of Engineering and Vardhaman college.
5. Sandeep CH, G Someshwar, G Ravi Kishore, E Supraja, Mirza Sajid Ali, K Deepika, S Upendra and Anagha had attended 6 Day FDP on Wireless Sensor using NS2 at Vardhaman Engineering College.
6. Upendra S had attended 6 Day FDP on Innovation in teaching, Research and Challenges in accreditation process for higher educational Institutions at St Peter’s Engineering College.

GLIMPSES OF STUDENTS ACHIEVEMENTS

1. V N Kameshwari had stood as 1st Runner up in grand finale for 1st edition youth zest virtual engineering project contest which was conducted at Indian Institute of projects and Technology on 1-5-2021.
2. Bhargavi had been awarded with Silver Medal in National Level Quiz on Analog Electronics and VLSI Design which was organized by IEEE Communication Society Students Chapter.
3. V N Kameshwari who stood second position in the event Bizplan which was conducted at Envisage'21 from 25-6-2021 to 27-6-2021.
4. Neha K for Good Performance in IUCEE EWB which was conducted by IUCEE.
5. Sai Alekhya and V N Kameshwari have won Second Prize in Project Expo during We conclave 2020.
6. V N Kameshwari was awarded Research Excellence in UG in the event which was Conducted at Fr C Rodrigues Institute of Technology.



STUDENTS CORNER

INTERNSHIPS

1. Bassetty Nikhil Kumar and Santosh Kumar Reddy had completed their Internship at Vijaya Bhanu Engineering India Pvt. Ltd.
2. Chilukuri Spandana had been selected as Intern at Society for Space Education Research and Development.
3. Potturi Hema Alekhya, V Sai Praneeth, Polla Varsha Reddy, P Pradyumma P Shivani, Tarun and Prerna had completed their Internships at We Hub.
4. Chitturi Sai Alekhya, Garrepally Tejaswi, Ghantasala Kiranmayee, Yarramshetty Vamshi and Pendayala Vivek had completed their Internship at Virtusa.
5. Arava Venkata Surya, Deekonda Manivardhan, Kouratla Sai Chaitanya, Mohammed Riyaz, Vemuru Akhila, Hajira Begum, Manjusha Kalyani, Niharika T and Vaddi Varun had completed their Internship at Capgemini.
6. Ganthi Sai Divya, Sindhu Likitha, Bhaanu Shree, Durga Tejaswi and Yalavarthi Likitha had completed their Internship at Multiplier Solutions.
7. Sagadam Rohitha, Dhulipala Venkata, Kurva Sakshi, Palleneeni Vamshi and Kaivalya Reddy had completed their Internship at The Climber.
8. Dontula Vishal and Kasab Shraavan Kumar had completed their Internship at Dhruvsoft.
9. Pranusha Priya, Sheri Pooja Reddy and Penta Venkateshwar had completed their Internship at Mediamint.
10. Parashram Sai Charan had completed his Internship at VI Solutions and Venago Innovations.
11. PV Sai Krithik had completed his Internship at Infotix Technosolutions.



INFOTIX TECHNOLOGICAL SOLUTIONS
DIGITALIZING THE FUTURE
A Start-up incubated by Anna University - CEGAIN (CEG Alumni Incubator)

Date: 30.12.2020

To,
Mr. PV Sai Krithik
SUB: Application for Internship
Dear Sai Krithik,

We acknowledge the receipt of your application for interning with us and we have gone through your resume. The master team reviewed your previous projects and we find you extremely competent and suited for the role as a developmental intern for AI projects. This is a virtual full-time internship where you will be working with a team of other interns lead by a Developmental Lead and you having previous real-time experience we would very much like your participation in coordinating and training the new interns to work together as a team to achieve mutual objectives. For this internship you will be paid an incentive of Rs.17,000 per month. You are entrusted with the responsibility of clearing doubts and helping our interns when they find it difficult. The developmental lead is responsible for the entire team and we expect compliance and coordination with him. We are extremely delighted to have you on board. All the best!

Sincerely,
Founder & CEO

First Floor, CPDE Building, Sardar Patel Road, Anna University, Chennai - 600 025, Tamil Nadu, India
9080681868 | info@infotixtechnosolutions@gmail.com



virtusa
July 19, 2021

Dear Sai Alekhya Chitturi,

Thank you for your recent visit to Virtusa Consulting Services Pvt. Ltd. India. Subsequent to our discussions with you, we are delighted to extend you an offer for a Virtual Internship. We believe you will bring an important role to our team growth and success, and look forward to welcoming you to the Virtusa team.

As the head of joining, the following will be applicable:

1. Job: Associate Engineer-Technology
2. Tier: Tier A

Your date of joining would be July 19, 2021.

You will be based at the Virtual Hyderabad Office. You will be on probation from your date of joining for a period of three months. You will be eligible for a promotion to the next level based on your performance during probation and upon completion of your probation. You will be eligible for a promotion to the next level based on your performance during probation and upon completion of your probation.

Your Total Remuneration will be INR 4,00,000.00 per annum as per Attachment.

A summary breakdown of the List of Benefits and the Breakup of Allowances that can be availed by you is attached. The Breakup of Allowances below gives you details regarding your compensation in a more detailed manner.

Please note that the offer is valid subject to successful completion of your background verification.

Sincerely,
Ravi Venkatesh Reddy
Chief People Officer & Global Head of Human Resources

Sai Alekhya Chitturi

ANNEXURE I

COMPENSATION & BENEFITS STRUCTURE

NAME / DESIGNATION / TIER	Per Month (in ₹)	Per Annum (in ₹)
Basic Components (A)		
Basic	18,000.00	1,44,000.00
Dear	3,000.00	24,000.00
Basket of Allowances (B)		
House Rent Allowance	0.00	0.00
Phone & Internet Reimbursement	0.00	0.00
Medical Reimbursement	0.00	0.00
Special Allowance	11,000.00	1,32,000.00
Fixed Reimbursement	0.00	0.00

Multiplier Solutions
AI Powered Healthcare Marketing

LETTER OF INTENT

Dear N Bhaanushree,

The purpose of this letter is to inform you that your candidature has been selected for the position of **Business Consultant and Digital Marketing Executive** in **Multiplier IT Solutions India Pvt Ltd.** We are excited to have you as part of our team.

We take the privilege to inform you that your employment will start from **01/June/2021** given that all the joining formalities including your bank formalities are completed by **06-March-2021**. However the expected date of joining could vary based on project requirements and unforeseen circumstances.

Note that: This LOI will be considered invalid after **06-March-2021** unless the joining formalities including Bank Guarantee is completed and the offer letter is issued and accepted by the candidate. Also the LOI needs to be accepted by the candidate and it will be considered valid from the date of issuance till 03-Dec-2020 only. Once the candidate has accepted the LOI they will not sit through any of the campus placements.

Looking forward to on-board you as a part of our team!

Saumya Prakash, Director, Multiplier IT Solutions India Pvt Ltd
N Bhaanushree, Signature



Pantech e Learning
ONLINE LEARNING PLATFORM

INTERNSHIP PROGRAM 2020
Certificate of Completion

THIS IS TO CERTIFY THAT
Mohammed Falyaz
Vidya Iyeshi Institute of Technology
FROM
HAS COMPLETED THE INTERNSHIP PROGRAM ON
Electronics using Arduino
CONDUCTED BY IETE - MUMBAI IN ASSOCIATION WITH
PANTECH E LEARNING
DATE: 21.12.2020 TO 08.01.2021

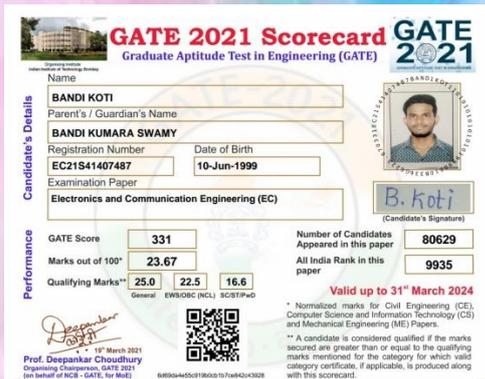
Signature of Faculty
Signature of Student

Certificate No: ICTE_INT_565
www.pantechlearning.com

STUDENTS CRACKING GATE

The Students of our department are always a step ahead in terms of Hard work and talent, and have always proved their ability to perform well in competitive exams.

1. Nimshi Nitin Darapogu has scored 417 and secured **All India 5118 Rank**.
2. Rohan G has scored 336 and secured **All India 9568 Rank**.
3. Bandi Koti has scored 331 and secured **All India 9935 Rank**.



GATE 2021 Scorecard Graduate Aptitude Test in Engineering (GATE) **GATE 2021**

Candidate's Details

Name: **BANDI KOTI**
 Parent's / Guardian's Name: **BANDI KUMARA SWAMY**
 Registration Number: **EC21S41407487** Date of Birth: **10-Jun-1999**
 Examination Paper: **Electronics and Communication Engineering (EC)**

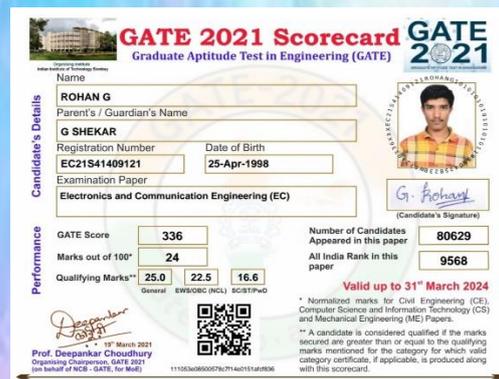
Performance

GATE Score: **331** Number of Candidates Appeared in this paper: **80629**
 Marks out of 100*: **23.67** All India Rank in this paper: **9935**
 Qualifying Marks**
 General: **25.0** EWS/OBC (NCL): **22.5** SC/ST/PwD: **16.6**

Valid up to 31st March 2024

* Normalized marks for Civil Engineering (CE), Computer Science and Information Technology (CS) and Mechanical Engineering (ME) Papers.
 ** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this scorecard.

19th March 2021
 Prof. Deepankar Choudhury
 Organising Chairperson, GATE 2021
 (on behalf of NCB - GATE, for MoE)



GATE 2021 Scorecard Graduate Aptitude Test in Engineering (GATE) **GATE 2021**

Candidate's Details

Name: **ROHAN G**
 Parent's / Guardian's Name: **G SHEKAR**
 Registration Number: **EC21S41409121** Date of Birth: **25-Apr-1998**
 Examination Paper: **Electronics and Communication Engineering (EC)**

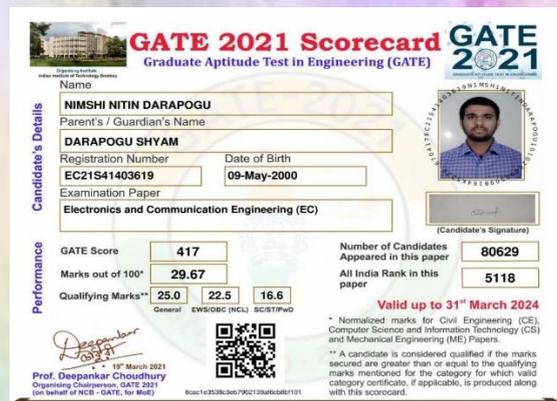
Performance

GATE Score: **336** Number of Candidates Appeared in this paper: **80629**
 Marks out of 100*: **24** All India Rank in this paper: **9568**
 Qualifying Marks**
 General: **25.0** EWS/OBC (NCL): **22.5** SC/ST/PwD: **16.6**

Valid up to 31st March 2024

* Normalized marks for Civil Engineering (CE), Computer Science and Information Technology (CS) and Mechanical Engineering (ME) Papers.
 ** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this scorecard.

19th March 2021
 Prof. Deepankar Choudhury
 Organising Chairperson, GATE 2021
 (on behalf of NCB - GATE, for MoE)



GATE 2021 Scorecard Graduate Aptitude Test in Engineering (GATE) **GATE 2021**

Candidate's Details

Name: **NIMSHI NITIN DARAPOGU**
 Parent's / Guardian's Name: **DARAPOGU SHYAM**
 Registration Number: **EC21S41403619** Date of Birth: **09-May-2000**
 Examination Paper: **Electronics and Communication Engineering (EC)**

Performance

GATE Score: **417** Number of Candidates Appeared in this paper: **80629**
 Marks out of 100*: **29.67** All India Rank in this paper: **5118**
 Qualifying Marks**
 General: **25.0** EWS/OBC (NCL): **22.5** SC/ST/PwD: **16.6**

Valid up to 31st March 2024

* Normalized marks for Civil Engineering (CE), Computer Science and Information Technology (CS) and Mechanical Engineering (ME) Papers.
 ** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this scorecard.

19th March 2021
 Prof. Deepankar Choudhury
 Organising Chairperson, GATE 2021
 (on behalf of NCB - GATE, for MoE)

NEXT PARADIGM - HIGHER STUDIES

1. V Surya Teja had been selected to pursue his Masters at Texas A&M University, Texas, USA.
2. P Varsha Reddy had been selected to pursue her Masters at UNT, North Texas, USA.
3. P Thabitha and Simra Tabassum had been selected to pursue their Masters at Wright State University, Dayton, Ohio, USA.
4. G Kaivalya Reddy had been selected to pursue her Masters at University of Houston, Houston, USA.
5. D Nimshi Nithin had been selected to pursue his MTech at IIT Kharagpur, Kharagpur, India.
6. K Ruchitha had been selected to pursue her Masters at California State University, California, USA.

STUDENTS CORNER

RECRUITMENTS AT GLANCE

VIRTUSA-5 (4LPA)

TIPLER SOLUTIONS-(3.8LPA)

TCS DIGITAL-1(7LPA)

BYJUS-2(8LPA)

HCL-4 (3.5LPA)

TECHIGAI-1 (5LPA)

PENTAGON SPACE-11(3LPA)

GEMINI-3 (2.4LPA)

CHEGG INDIA-4(2.4LPA)

ZENQ-2 (2.8LPA)

ACCENTURE-4 (4.5LPA)

CAPGEMINI-9 (3.8LPA)

THE CLIMBER-5(4LPA)

TCS NINJA-1 (4LPA)

WIPRO-3 (3.5LPA)

INFOSYS- 2 (3.5LPA)

ADP-2 (5LPA)

SPR HUMAN CAPITAL-2

OSPIDERS-4 (2.4LPA)

PROLIFICS INDIA-1 (3LPA)

DHRUVSOFT-2 (2.5LPA)

ACS SOLUTIONS-1 (5.16LPA)

INNOVATIONS @ ECE

DHANYAM PANCHAE KIOSK

DPK UNIT a.k.a Dhanyam Panchae Kiosk is an automatic food distribution unit developed by Alekhya, Karishma, Mounika and Kiranm-mayee of IV year under the guidance of K Vasanth . DPK is an automated unit for faster weighing of items and dispatching system. We know that ration distribution system is a slower process, it involves manual kind of weighing of ration and manual entry



of data of users who took the ration. This DPK variant uses face recognition as an authentication process. After the successful authentication, the unit automatically weighs the exact amount of ration and it will automatically dispatch the ration. Then the unit immediately takes the details of the user and these details are stored in the database for further information to the government. Therefore, the process of ration distribution system is made easier, faster and secure. This unit removes different problems like scam involvement, proxy issues and authentication problems in the present scenario. Since we are installing this in the same areas, it does not include any rental costs. This DPK variant eliminates the problems of people standing hours together in front of ration centres.

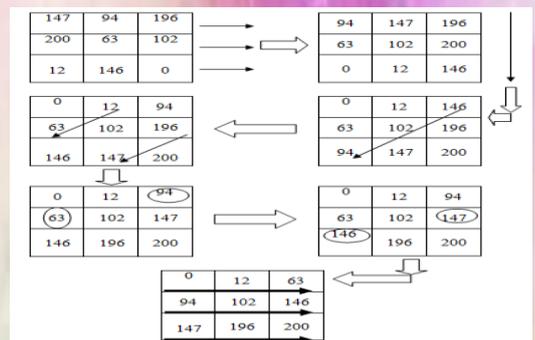
MASK REUSE BOX



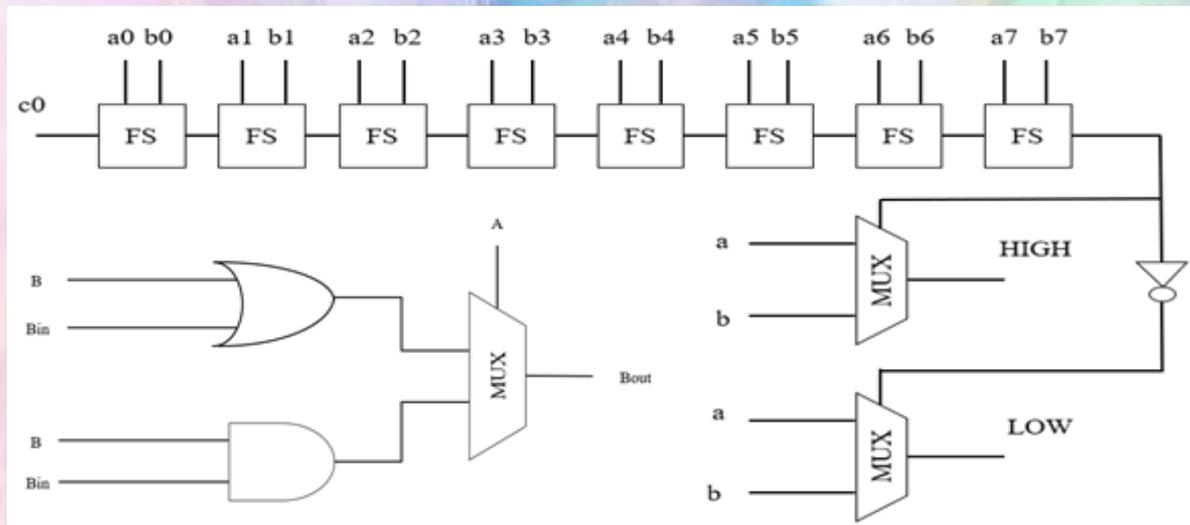
The Mask Reuse Box was developed by Shreya Sree, Sreeja, Koti and Madav Shekar of Final Year under the guidance of Mr Sheik Maznu and Dr K Vasanth. The humongous use of face masks is on rise. In the period of Covid-19 to stop the spread of SARS-Cov-2, certain personal health control measures need to be followed such as face masks, surgical masks and cloth masks have been employed. To limit and control transmission in both public and health workers are use in deliberated as source command to ceiling transmission of the virus and self-preservation to stop infection. Most of these masks contain or are made of polypropylene, which does not break down quickly. This plastic does not disappear but rather slowly breaks down into micro plastic, which enters food chains with devastating effects. These masks can't be recycled as well. The above stated problem leads as a threaten to the marine life and also increasing in bio medical waste leads in lack of resources. So in order to give solution for the above problem we came up with an idea that is the Mask Reuse Box. We are using ultra violet rays (UVC) to kill the virus (can kill any type of virus including covid-19) on the mask and to clean we are using cleansers. At the end heater or Dryer is used to receive the dry mask.

VASANTH SORTING AND ITS IMAGE APPLICATION

Students of ECE had developed a sorting technique in association with Dr. K. Vasanth. A Standard Median filters are used for removing salt and pepper noise in images and videos. The basic operation of median filtering is rank ordering. A Fixed 3x3 window is employed over every pixel of the image to replace each pixel with a median value obtained from the confined vicinity. This results in an image without salt and pepper noise. The pixel of each window requires a specified number of comparisons to rank the order of the pixels. If the window is man-euvered over an entire image then the number of comparisons is very high. The proposed work introduced a new sorting technique called "Vasanth Sorting" for arranging the data in increasing order that it requires 25 number of comparators to arrange 9 elements.



MULTIPLEXER BASED DATA COMPARATORS



An 8 bit Data comparator is a basic processing element in a Median Calculation. The Basic operation in a comparator is subtraction. The Basic processing element in the proposed data comparator is a full subtractor. The above Figure gives the basic architecture of a Data Comparator. In this architecture there are two Multiplexers that select a high or low value from the given inputs “a” and “b” based on the carry generated to the selection lines from bitwise comparators. The Carry generator consists of eight bitwise full subtractor, which propagates carry to select a High and low values from both the input. The initial bit will always have carry to be zero. Hence a Half Subtractor is considered rather than a Full Subtractor.

“ BE THE CHANGE YOU WANT TO SEE IN THE WORLD”

-MAHATMA GANDHI