



# KIET IJCE

## KIET International Journal of Communications & Electronics

VOLUME 8, FIRST ISSUE, JAN-JUNE 2020,  
ISSN:2320-8996



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# Editorial

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In the world of communication, the study of various techniques like ATM makes all the transactions paperless. Bank provides ATM card to the customer to provide the services like cash withdrawal, balance inquiry etc. Main advantage of existing system is quick cash providing by the ATM system. But it has the disadvantages like smart cards and physical keys can be stolen, lost, replicated or left behind. Passwords can be shared, forgotten, hacked or accidentally observed by a third party. To overcome these problems, this fingerprint-based ATM system is developed. To improve security in ATM machine by replacing swipe cards as fingerprint and also ATM pin as OTP. Fingerprint scanner is used to identify and verify corresponding person. we can store, compare and delete the fingerprint through fingerprint scanner.

The static image segmentation is the initial step of common image recognition problem. Usually the image intensity (or color) data are used to the image pixels separation to the two common clusters: background pixels and object pixels. On the next stages only object pixels have been processed. The very common approach to the image segmentation is the intensity (colour) histogram threshold detection. We should also note than the simplest threshold algorithms are effective only in case of homogeneously coloured objects against the same background. we will consider only gray-level segmentation technique, because the colour images may be normalized to the gray-level representation. The troubles of statistical processing for that images are related with the main problem of statistics: the statement of standard probability distribution pixel intensity. Because the pixel samples may be insufficiently large for the statistical laws application, we need another form of image intensities distribution (possibility distribution). The main goal of current study is the new kind of static segmentation algorithm for the gray-level digital images under the low resolution and noise corruption conditions. The basis of new results are the preceding ideas and results in the fuzzy information granulation methods from papers.

In Digital Electronic, as we know the most widely used flip flop is D flip flop which is an edge-triggered device that allows the transfers input data from Q on clock rising or falling edge. Its widely used for storage and circuits registers. For making it effectively use we always make some improvements in a better performance like Power characteristics and energy dissipation, gate leakage. Researchers have developed various types of models of static and dynamic D flip flops with various changes in their efficiency and power-saving but still, we have various ways to implement it and making it effectively useful. The proposed circuit according to the simulation results in HPSICE software is proved to be better in terms of Average power, propagation time delay, Energy Dissipation. Also, voltage source power dissipation is nearly the same in GNRFETs configuration and much better in case of comparison with the bulk CMOS MOSFET counterpart. That is shown by Graphical representation in this paper. GNRFET with power gating proved as the promising substitute under the 22nm category of channel length technology.

# Preface

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**Dear Researchers,**

We take this opportunity to welcome you all to the Volume No 8, Issue No. 1 of International Journal of Communications & Electronics (KIET - IJCE). This journal will provide a forum for in depth and substantial discussions on the theory, design and implementation of the emerging technologies in Communications, Networking, Microwave and Electronics techniques, thus providing solutions and strategies for business resilience.

It gives us an immense pleasure to have an amalgam of researchers from the fields of Communication Engineering, Electronics, and related technologies. The purpose of the Journal is to provide a platform to foster interdisciplinary communication among the delegates and to support the sharing process of diverse fields in various concepts and principles related to these domains.

Our appreciation also goes to entire team whose dedication and timeless efforts have gone for number of days for the second issue of the Journal.

**Editors**



## Message

I am delighted to note that the Department of Electronics and Communication Engineering, KIET Group of Institutions, Ghaziabad is introducing Volume No 8, Issue No. 1 of International Journal of Communications and Electronics (KIET - IJCE).

I appreciate the efforts on the part of the Editorial Committee in bringing out an issue on Communications, Networking, Microwave and Electronics techniques.

I understand that the papers contributed for publication in the Volume No 8, Issue No. 1 are on almost all the current aspects of Communication Systems, Electronics systems, Microwave Engineering, Signal Processing & Applications, Networking Technologies and several others.

I have great pleasure in congratulating the Editors of this issue of KIET - IJCE for their untiring efforts in bringing out this seventh Volume No 8, Issue No. 1 of KIET-IJCE which will be a valued treasure for all who pursue research in Communications, Networking, Microwave and Electronics Engineering areas.

Let me close with warmest regards.

Dr. (Col) A Garg  
Director  
KIET



It is our pleasure that KIET is releasing the sixth volume of International Journal of Communications and Electronics (KIET - IJCE). Education is the base for building a good nation and we feel proud to be the contributor of such transformational nation.

I appreciate the efforts on the part of the Editorial Committee in bringing out an issue on Communications, Networking, Microwave and Electronics techniques.

I have great pleasure in congratulating the Editors of this issue of KIET - IJCE for their untiring efforts in bringing out this seventh Volume No 8, Issue No. 1 of KIET-IJCE which will be a valued treasure for all who pursue research in Communications, Networking, Microwave and Electronics Engineering areas.

Dr Manoj Goel  
Joint Director  
KIET



## Message

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It gives me immense pleasure in writing this foreword for the Volume No 8, Issue No.1 of the KIET International Journal on Communications and Electronics (KIET - IJCE). This journal is targeted towards researchers, professionals, educators and students to share innovative ideas, issues, recent trends and future directions in the fields of Electronics and Communication Engineering.

The Volume No 8, Issue No. 1 of the journal KIET-IJCE includes papers on the theory, design and implementation of the emerging technologies in the field of Communications, Networking, Microwave and Electronics techniques. Furthermore, it will enable the researchers in various domains to foster the exchange of concept, prototypes, research ideas and the results of research work which could contribute to the academic arena and also benefit business and industrial community.

**Dr. Sanjay Sharma**  
Editor – in - chief  
KIET - IJCE