



R. C. Patel Educational Trust's
R. C. Patel Arts, Commerce and Science College
Shirpur-425405, Karvand Naka, Dist.- Dhule (Maharashtra)
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Affiliated to: K. B. C. North Maharashtra University, Jalgaon-425001

Self Study Report (SSR): 2024 (4th Cycle)



Criteria - 3

Research, Innovations and Extension

Key Indicator - 3.3

Research Publication and Awards

Metric No. - 3.3.2 (Q_nM)

Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Submitted to

National Assessment and Accreditation Council, Bangalore



R. C. Patel Educational Trust's

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Dr. D. R. Patil

Date: 15/06/2024

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This declaration is for the purpose of NAAC accreditation of the HEI for the 4th cycle assessment period 2018-19 to 2022-23.

Place: Shirpur

Date: 15/06/2024

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IQAC Coordinator

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R. C. Patel Arts, Commerce and Science College

Shirpur, Dist.-Dhule (M.S.) 425405



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Shirpur, Dist.-Dhule (M.S.) 425405

Melanoma Skin Image Segmentation Using K-Means, and Thresholding Techniques

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Abstract:- After preprocessing melanoma skin image, we are interested in finding region of interest (ROI), we can find region of interest after segmenting image. For segmentation purpose numerous techniques are available. But all techniques are not suitable for each modality. We have tested our modality with k-mean, and thresholding techniques. For study purpose we considered melanoma skin images for each technique and study their performance based on various performance matrices.

1.0 Introduction:-

After preprocessing of images and before extracting features of image it is necessary to find area of interest. And we can find area of interest only after doing proper segmentation of image. There are numerous techniques for segmentations. Segmentations used in many application areas including medical, designing, modeling etc. in medical image segmentation mostly k-mean and thresholding techniques are used. Also found from many research papers that these two methods of segmentations are considered in most research papers. In this paper we considered these two techniques for segmentation k-mean and thresholding. And study their performance based on various performance matrix include IoU, Dice Coefficient, f1 score and pixel accuracy.

2.0 Literature Review:-

Yuheng, consider k-mean technique for segmentation and find better result (Song Yuheng, 2017) Sulaiman discussed various techniques of segmentation and found thresholding better result as compare to other methods he considered. (Sulaiman

S N, 2010) Zhou try to considered various technics and performance matrices for comparing various segmentation technics. (H. Zhou, 2018) Celebi study various techniques of segmentations and found thresholding better among others. (M. E. Celebi, 148-153). Zhou considered performance parameter and focus on performance metrics f1 score (H. Zhou G. S., 2009). Yuan worked on segmentation technics and conclude that k mean segmentation technique is better among all other techniques. (X. Yuan, 2009)

3.0 Methodology:-

For our experiment we consider database provided by ISIC challenging data base 2017. This data set provided about 2000 images. This data set also provides ground truth of segmentation.

Steps:-

1. Considered images provided by ISIC Challenging data set 2017.
2. Segment each image by k-Mean and thresholding.
3. Arrange them in tabular manner as original image, segmented image using k-mean and thresholding with their relative mask.



Dhanaji Nana Chaudhari Vidya Prabodhini Sanchalit

Shirish Madhukarrao Chaudhari College, Jalgaon.

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has attended/presented a paper/ poster/ chaired a session in the International Conference on "Innovative Sustainable Practices in Science and Technology (ISPISAT-2022)" held at Jalgaon (M.S.) on 26th Nov. 2022. He / She has presented a paper entitled

Comparison of Gaussian filter and median blur filter pre processing techniques based on Mean Square Error for melanoma skin cancer images.

S.S. Joshi

Dr. Sandeep S. Joshi

(Convener)

Rajendra

Dr. Rajendra B. Waghulade

(Organizing Secretary & Principal)

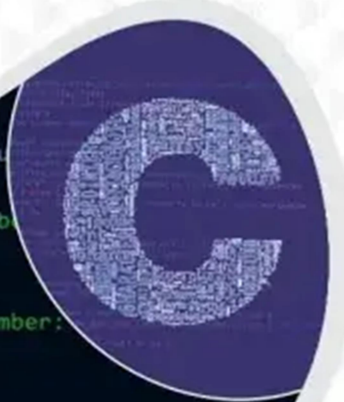
▪ F.Y.B.Sc. ▪ SEM. I ▪ CS 102

KBCNMU
NEW SYLLABUS

COMPUTER

(CBCS PATTERN)

PROGRAMMING IN C - I



```
printf("Enter First Number: ");
scanf("%d", &number1);

printf("Enter Second Number: ");
scanf("%d", &number2);

// calculating sum
sum = number1 + number2;

printf("Addition of %d and %d is %d", number1, number2, sum);
```



▪ Prof. Sunil D. Mone ▪ Dr. Rupali P. Patil
▪ Dr. Monali Y. Khachane

As per Syllabus of Kavayitri Bahinabai Chaudhari North Maharashtra University,
Jalgaon with effect from June-2022

Choice Based Credit System (CBCS)

A Text book of

COMPUTER

Programming in C-I

(CS-DSC 1A - CS 102)

F.Y.B.Sc. (CBCS) Semester I

Prof. B. S. Panchbhai
Head, Department of Computer Science,
R.C.Patel ACS College, Shirpur
(M.C.S.,M.Phil)

Prof. Pushpa M. Patil
Head, Partap College (Autonomous),
Amalner
(M.Sc.,M.Phil, NET, SET)

Prof. Amit N. Shinde
R.L.College, Parola
(M.Sc,NET, SET)

Prof. Nilima V. Bhadane
JET's Z.B. Patil College, Dhule
(M.Sc.,NET,SET)



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(Fourth Cycle as per new framework)

UGC Honoured College with Potential for Excellence

Department of Computer Science & Information Technology

Organizes

8th National Conference (Online) On

(ETCIT-2023)

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*This is to certify that, Mr./Miss. **Mr.Anand J. Maheshwari***

*Of **R.C.Patel Arts, Commerce, and Science. College, Shirpur***

*Has actively Participated and Presented a paper on **Leveraging influencing attributes to predict mental health using machine learning algorithms***

*In One Day National Level Conference on **"Emerging Trends In Computer & Information Technology"***

*On **27th March 2023***

Prath

Organizing Secretary

Prof. Poonam M. Mahajan

Asst. Professor, Dept. of CS&IT,

BASPONC College, Bhusawal

H

Convener

Dr. G. R. Wani

HOD, Dept. of

Computer Science,

BASPONC College, Bhusawal

Bhaskar

Convener

Dr. B. H. Barhate

Vice-Principal, HOD, Dept. of

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Prudh

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Jalgaon (M.S.) on 26th Nov. 2022. He / She has presented a paper entitled
Predicting drug types based on various attributes

ssjoshi
Dr. Sandeep S. Joshi
(Convener)

Rwag
Dr. Rajendra B. Waghulade
(Organizing Secretary & Principal)



As per new revised syllabus of
Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon
With effect from June-2022



COMPUTER

Internet Computing

(CS : 201)

F.Y.B.Sc.

Semester II Paper -I



Joint Venture Publication

Prof. B. S. Panchbhai
Mrs. Arati B. Patil
Mrs. Leena V. Bhole
Dr. Varsha M. Pathak



Sem. - I
BCA - 103

Programming in C - I

Prof. B. S. Panchbhai
Prof. Dr. Varsha M. Pathak

```
namespace MyProject
```

```
{  
public class Customer
```

```
{  
private string name;
```

```
private string address;
```

```
private string phone;
```

```
private string email;
```

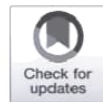
```
private string password;
```

```
public string CustomerName;
```

```
{
```


Chapter 14

Polymer-Based Nanoplatfoms for Targeting Breast Cancer



Rahul Shankar Tade, Pravin Onkar Patil, Sopan Namdev Nangare, Ashwini Ghanshyam Patil, Mahesh Prabhakar More, Prashant Krishnarao Deshmuk, Zamir Gaffar Khan, Abhieet Pandey, Sai Boddu, Dilip R. Patil, Srinivas Mutalik, Arun M. Patil, Sharad Wakode, and Sanjaykumar Baburao Bari

14.1 Introduction

Breast cancer remains the utmost feared disease among women with the highest mortality rate. It impacts about 2.1 million lives each year (DeSantis et al. 2019). Researchers speculate that soon breast cancer will be the major disease of concern in the health care system. Clinicians describe or classify by staging or grading systems. The systematic classification helps to find suitable or available treatment options along with the forecasting of treatment strategies (Harwansh and Deshmukh 2020; Tade and Patil 2020). The molecular as well as histological indications

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Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Research,
Manipal, Karnataka, India

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S. Padhi et al. (eds.), *Polymeric nanoparticles for the treatment of solid tumors*,
Environmental Chemistry for a Sustainable World 71,
https://doi.org/10.1007/978-3-031-14848-4_14

Ravindra H. Patil · Mohini P. Patil ·
Vijay L. Maheshwari

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Ethnobotany, Phytochemistry,
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Frontiers in Life Science

Volume IX

Editors

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Dr. Sandip P. Patil

Dr. Dhvani Upadhyay

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First Edition: 2022



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OF PARTICIPATION

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DR HARISHCHANDRA BHILA PATIL

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for the successful presentation of Research Oral/Poster entitled as "The investigation of structural and optical properties of mercury sulfide by chemical bath deposition technique" in the National Level Conference on Chemical Science for Sustainable Development organized by PG and Research Department of Chemistry in collaboration with Association of Chemistry Teachers KBCNMU, Jalgaon, Maharashtra and Sponsored by KBCNMU, Jalgaon, Maharashtra on March 17, 2023.

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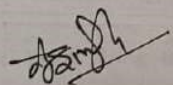
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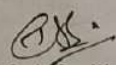


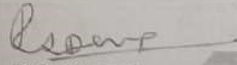
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Research paper entitled The Stream of Humanities; The Challenges in
Imminent Era His/her active participation is highly appreciated.




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Convenor


(Prof. J.S. Jilani)
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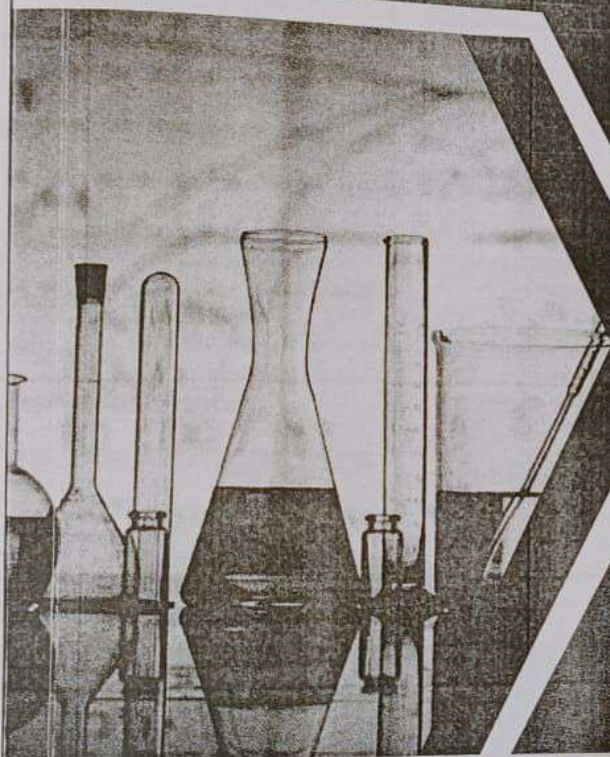
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CHEMISTRY

Practical Handbook for Course CH : 103

F.Y.B.Sc. (CBCS)



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Prof. Jayvant P. Sonawane
Dr. Yogesh A. Tayade
Dr. Jamatsing Rajput
Dr. Mahendra S. Borse
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Semester I



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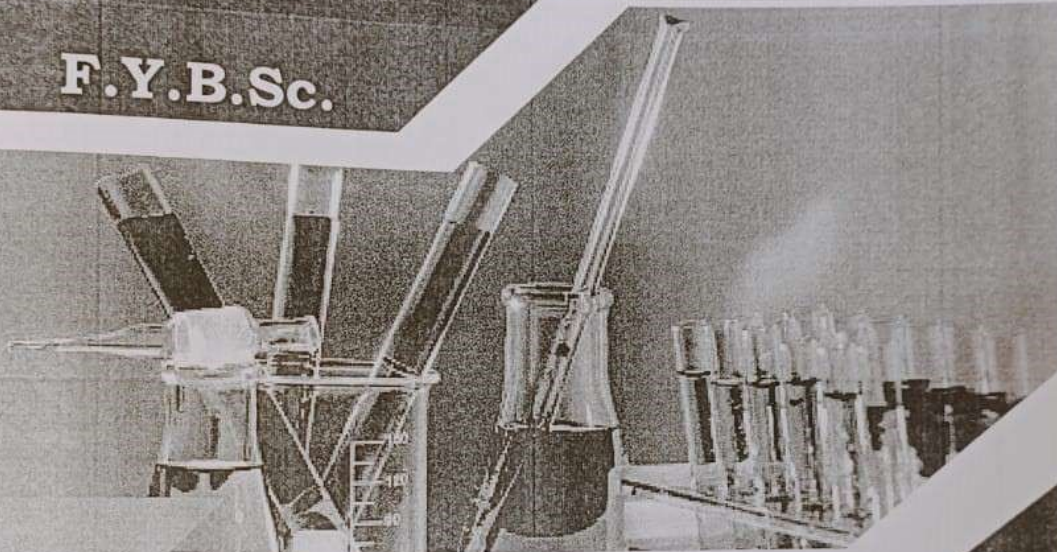


CHEMISTRY

Practical Handbook for Course CH : 203

Semester II Paper -III

F.Y.B.Sc.



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Dr. Yogesh A. Tayade
Dr. Mahendra S. Borse
Dr. Prafulla S. Patil
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Dr. Sanjay V. Chavan
Prof. Anil S. Waghmare



Joint Venture Publication

▪ F.Y.B.Sc. ▪ SEM. I ▪ ELE 101

KBCNMU
NEW SYLLABUS

ELECTRONICS

(CBCS PATTERN)

CIRCUIT COMPONENTS AND NETWORK ANALYSIS



▪ Prof. (Dr.) A. L. Chaudhari ▪ Dr. L. B. Patle
▪ Prof. (Dr.) R. S. Khadayate ▪ Dr. S. G. Bachhav

Dr. S. G. Bachhav

As per U.G.C. Guidelines and also on the basis of revised syllabus of
Kavayitri Bahinabai Chaudhari North Maharashtra University
with effect from Academic Year 2022-23. Also useful for all Universities.

F.Y.B.SC. ■ SEM II ■ ELE-201
ELECTRONICS
ANALOG ELECTRONICS

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MGSM's Arts, Sci. and Comm. College,
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Dr. K. D. Kucche
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Department of Mathematics
Shivaji University, Kolhapur



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HEAD
Department of Mathematics
Shivaji University, Kolhapur

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Patient Chief Complaints Keyterm Extraction using Text Pre-processing Techniques

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Abstract — Significant improvements in natural language processing technologies have been made over the past decade. The study is currently being conducted to extract relevant keyterms from the patient chief complaints in Marathi. We obtained our data from a solitary, nonprofit, private hospitals from rural area of India's North Maharashtra Region. Data with respect to 3600 patient visits, between the years of 2020 and 2021 is collected from the hospitals. The efforts resulted in a collection of total 4000 text-free chief complaints. This article presents the study that focuses on the text pre-processing techniques developed in effective manner for extraction of relevant keyterms from the phrases according in the main complaints of the patients. This article presents the methodology and the results regarding this experimental works.

Keywords — NLP techniques, Extraction, Marathi, Pre-processing, keyterms

INTRODUCTION

Text pre-processing is an essential and fundamental stage in Natural Language Processing before developing any model. In order to clear up ambiguity and inconsistencies from a raw text corpus that has been gathered from one or more sources, pre-processing is required [1]. In order to access precise and dependable data, a user must devise the most effective technique available. Even after cleaning, more text pre-processing is required to rearrange the data so that it may be immediately entered into the model. If text pre-processing is not done properly, the data will be as useful as useless, and the NLP model produced will only be as bad as useless. Many well-known languages have been the subject of research in the field of text processing. However, regional language text is now very necessary. In Maharashtra, where the Marathi language is somewhat less focused, this has been taken into account when

analyzing the work for regional languages. This study was created to extract pertinent keyphrases from phrases in accordance with the patients' main concerns and it relies on text pre-processing approaches. The article that follows covers the methodology, findings, and literature review.

Literature Survey

S.P. Paramesh [2] asserts that the description data for IT tickets needs to be cleaned up in order to improve outcomes. To omit terms from the text, the author used POS tagging, stemming, and the list of common English stopwords. Porter's stemmer has reduced the word to its most basic form. Phone numbers and email addresses are also removed from the dataset using pattern matching regex methods to produce better results. Shreedhara K.S. eliminated noisy data in order to. Effective text preparation has been emphasized by [4]. Stopwords are removed together with date, time, and numeric data using regular expressions, which are