MGM's College of Engineering, Nanded

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

Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Calendar Year of publication	ISBN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	A. I. Rehman and Dr. G.S.Lathkar,		Finite Element Analysis of laser welding of 304L butt joint	International Conference on Advanced Technologies in Chemical, Construction and Mechanical Sciences	ICATCHCOME 2023	International	2023	2214-7853	MGMs College of Engineering, Nanded	Elsevier Publishers
2	Dr. Mohd. Zameeruddin	Performance - based Seismic Assessment of Reinforced Concrete Structures				National	2023	9789392193316	MGM's College of Engineering, Nanded	Apex Publication, Jaipur New Delhi
3	A. I. Rehman and Dr. G. S. Lathkar,		An Investigation into Carbon/Epoxy Composites for Conceptual Design of Automobile Vehicle Under Various Loads	International Conference on Advancements in Interdisciplinary Research	AIR 2022	International	2022	9788770228282	MGMs College of Engineering, Nanded	Proceedings-International Conference on Advancements in Interdisciplinary Research
4	Dr. Rajurkar, A.M.		Early Detection of Stem Borer in Grape Diseases	Next Generation Information Processing System	Artificial Intelligence in Agriculture, Volume 5	International	2022	ISBN 978-981-15-4851-2	MGMs College of Engineering, Nanded	Springer
5	Dr. Rajurkar, A.M, R. G. Bisen and N. S. Pande		The Role of Medical Imaging in COVID-19 Detection and Diagnosis: A Review	Advancement in Technology (ICONAT)	International Conference for Advancement in Technology (ICONAT) 2022	International	2022	ISBN:978-1-6654-2577-3	MGMs College of Engineering, Nanded	IEEE

6	Manisha A. Manjramkar and Dr. K. C. Jondhale		Cyber Security Using Machine learning Techniques	International Conference on applications of Machine Intelligence and Data Analytics (ICAMIDA-2022)	ICAMIDA 2022	International	2022	10.2991/978-94-6463-136-4_59	MGMs College of Engineering, Nanded	Atlantis Press – Springer Nature
7	Dr. Mrs. K.C. Jondhale and L. M. Waghmare	Human Face Recognition using FSVD and RBF Neural Network					2022	13: 978-620-4-97873-4,	MGMs College of Engineering, Nanded	LAP LAMBERT Academic Publishing
8	Dr. Mohd. Zameeruddin [et al]		Review of Recent Developments in the Damage-based Seismic Performance Evaluation of Reinforced Concrete Structures	Multidisciplinary Research and Innovation-21	NCMRAI-21	National	2022	9789391331245	MGM's College of Engineering, Nanded	Sipna College of Engineering and Technology, Amravati (m.s)
9	Dr. Mohd. Zameeruddin [et al]		Performance Evaluation of RC Structures using Next-generation Perfformance-based Seismic Assessment Procedures	Computational Optimization, Modelling and Simulation: Recent Trends and Challenges	SHAASTRART H-2022	International	2022	9789356078772	MGM's College of Engineering, Nanded	Rungta College of Engineering and Technology, Bhilai, Chattisgarh
10	Dr. Mohd. Zameeruddin [et al]		Seismic Damage Assessment of Low-rise, High-rise and Medium-rise Reinforced Concrete Buildings using Performance-based Seismic Design Approach	International Conference on Scientific Computing in Innovation	ICSCI-2022	International	2022		MGM's College of Engineering, Nanded	Guru Nanak Institute of Technology, Nagpur
14	Dr. Mohd. Zameeruddin [et al]		Seismic Damage Assessment of Low-rise, High-rise and Medium-rise Reinforced Concrete Buildings using Performance-based Seismic Design Approach	International Conference on Smart Environment Management and Solutions	ICEMS-2022	International	2022		MGM's College of Engineering, Nanded	Institute for Engineering Research and Publication

15	Manisha A. Manjramkar and Dr. K. C. Jondhale		Cyber security using machine learning techniques	International Conference on Applications of Machine Intelligence and Data Analytics	ICAMIDA 2022	International	2022	10.2991/978-94-6463-136-4_59	MGMs College of Engineering, Nanded	Atlantis Press – Springer Nature
16	Mr. R. G. Bisen		The Role of Medical Imaging in COVID-19 Detection and Diagnosis: A Review	Advancement in Technology (ICONAT)	International Conference for Advancement in Technology (ICONAT) 2022	International	2022	978-1-6654-2577-3,ISBN:978-1-6654-2578-0	MGMs College of Engineering, Nanded	IEEE
17	Ms. N. S. Pande		The Role of Medical Imaging in COVID-19 Detection and Diagnosis: A Review	Advancement in Technology (ICONAT)	), International Conference for Advancement in Technology (ICONAT) 2022	International	2022	978-1-6654-2577-3,ISBN:978-1-6654-2578-0	MGMs College of Engineering, Nanded	IEEE
10	B. S. Kapre and Dr. A. M. Rajurkar	Communications in Computer and Information Science book	Self-embedding and Variable Authentication Approach for Fragile Image Watermarking Using SVD and DCT	International Conference on Cognition and Recongition 2021	International Conference on Cognition and Recongition 2021	International	2021	978-3-031-22404-1	MGM's College of Engineering, Nanded, India	Springer, Cham
11	M. R. Banwaskar, Dr. A. M. Rajurkar and D. S. Guru	Communications in Computer and Information Science book	Selected Deep Features and Multiclass SVM for Flower Image Classification	International Conference on Cognition and Recongition 2021	International Conference on Cognition and Recongition 2021	International	2021	978-3-031-22404-1	MGM's College of Engineering, Nanded, India	Springer, Cham
12	B. S. Kapre and Dr. A. M. Rajurkar		Robust and Secure Lucas Sequence-Based Video Watermarking	Applied Computer Vision and Image Processing	Advances in Intelligent Systems and Computing	International	2021	978-981-15-4028-8	MGMs College of Engineering, Nanded	Springer
21	Dr. M. R. Banwaskar	Communications in Computer and Information Science book	Self-embedding and Variable Authentication Approach for Fragile Image Watermarking Using SVD and DCT	International Conference on Cognition and Recongition 2021	International Conference on Cognition and Recongition 2021	International	2021	978-3-031-22404-1	MGM's College of Engineering, Nanded, India	Springer, Cham
22	Dr. M. R. Banwaskar	Communications in Computer and Information Science book	Selected Deep Features and Multiclass SVM for Flower Image Classification	International Conference on Cognition and Recongition 2021	International Conference on Cognition and Recongition 2021	International	2021	978-3-031-22404-1	MGM's College of Engineering, Nanded, India	Springer, Cham

23	Dr. Kapre B.S.	Communications in Computer and Information Science book	Self-embedding and Variable Authentication Approach for Fragile Image Watermarking Using SVD and DCT	International Conference on Cognition and Recongition 2021	International Conference on Cognition and Recongition 2021	International	2021	978-3-031-22404-1	MGM's College of Engineering, Nanded, India	Springer, Cham
24	Dr. Kapre B.S.		Robust and Secure Lucas Sequence-Based Video Watermarking	Applied Computer Vision and Image Processing	Advances in Intelligent Systems and Computing	International	2021	978-981-15-4028-8	MGM's College of Engineering, Nanded, India	Springer
13	Dr. R. Kavitha and Ms. Jyoti S. Kale		An inside and out investigation of cloud-fog processing: design, application areas with security	International Conference on Innovations and Trends in Computing	ICITC-2021	International	2021	I978-1-6654-0474-7	MGM's College of Engineering, Nanded, India	ICITC-2021
14	Anith Thengade and Dr. A. M. Rajurkar		Segmentation of Knee bone using MRI	Applied Computer Vision and Image Processing	AISC-2020	International	2020	978-981-15-4028-8	MGM's College of Engineering, Nanded, India	Springer
15	Aparna Pande, Dr. Y. V. Joshi, Dr. M.Y. Joshi and Dr. Lalitkumar Wadhwa	ICCIP-2020, SSRN,Elsevier.	Optimal Tree Structure for Secure Group Communication Using LKH Approach	International Conference on Communication and Information Processing	ICCIP-2020	International	2020	https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3649833	MGM's College of Engineering, Nanded, India	SSRN, Elsevier
16	Dr. A. M. Rajurkar and R. G. Bisen	Computing in Engineering and Technology Proceedings of ICCET 2019	Segmentation, Detection and Classification of Liver Tumors for Designing a CAD System		ICCET-2019	International	2020	978-981-32-9515-5	DIEMS, Aurangabad	Springer Nature Singapore Pvt. Ltd. 2020
17	Aparna S. Pande, Dr. Y. V. Joshi and Dr. M.Y. Joshi	Computing in Engineering and Technology Proceedings of ICCET 2019	Enhanced Strict Binary Logical Key Hierarchy Algorithm for Secure Group Communication		ICCET-2019	International	2020	978-981-32-9515-5	DIEMS, Aurangabad	Springer Nature Singapore Pvt. Ltd. 2020
28	Mr. R. G. Bisen	Computing in Engineering and Technology Proceedings of ICCET 2019	Segmentation, Detection and Classification of Liver Tumors for Designing a CAD System		ICCET-2019	International	2020	978-981-32-9515-5	DIEMS, Aurangabad	Springer Nature Singapore Pvt. Ltd. 2020

18	Musharraf Hina Khan and K. C. Jondhale	A discriminative Model for Age Invariant Face Recognition					2019	978-260-0-00364-5	MGMs College of Engineering, Nanded	LAP LAMBERT Academic Publishing
19	Archana Sable, Haricharan Dhirbasi Dr. Ms. K. C. Jondhale	E-Book:Modified Double Bilateral Filter for Sharpness Enhancement and Noise					2019	13:978-613-9-92150-8 ISBN: 10:6139921503	MGMs College of Engineering, Nanded	LAP LAMBERT Academic Publication
31	Dr. Mohd. Zameeruddin [et al]		Performance-based Seismic Evaluation of Reinforced Concrete Structure Subjected to lateral laods	Management Practices, Innovations and Research	MPIR-19	International	2019		MGM's College of Engineering, Nanded	Tulsiramji Gaikwad-Patil College of Engineering and Technology, Nagpur
32	Dr. Mohd. Zameeruddin [et al]		Seismic Damage Assessment of Low-rise, High-rise and Medium-rise Reinforced Concrete Buildings using Performance-based Seismic Design Approach	Management Practices, Innovations and Research	MPIR-19	International	2019		MGM's College of Engineering, Nanded	Tulsiramji Gaikwad-Patil College of Engineering and Technology, Nagpur
33	Dr. Mohd. Zameeruddin [et al]		Seismic Damage Assessment of Low-rise, High-rise and Medium-rise Reinforced Concrete Buildings subjected to Blast Loading using Performance-based Seismic Design Approach	Management Practices, Innovations and Research	MPIR-19	International	2019		MGM's College of Engineering, Nanded	Tulsiramji Gaikwad-Patil College of Engineering and Technology, Nagpur
34	Dr. Mohd. Zameeruddin [et al]		Performance-based Seismic Evaluation of Medium Rise 3D Bare Frame	International Conference on Engineering Technology, Science and Management Innovation	ICETSMI	International	2018		MGM's College of Engineering, Nanded	Academic Science, Mahratta Chamber of Commerce Industries and Agriculture, Pune

20	Manisha A. Manjramkar		Survey of Diabetic Retinopathy screening methods	International Conference on Trends in Electronics and Informatics	ICOEI-2018	International	2018	978-1-5386-3570-4	MGMs College of Engineering, Nanded	IEEE
36	Ashvini Pinjarkar and D. J. Tuptewar		Robust Exemplar Based Image And Video InpaintingFor Object Removal And Region Filling	2017 International Conference on Intelligent Computing and Control (I2C2)	2017 International Conference on Intelligent Computing and Control (I2C2)	International	2018	978-1-5386-0373-4	MGMs College of Engineering, Nanded	
21	Divyani S. Hadoltikar and D. J. Tuptewar		DRLBP based edge texture features for Object Recognition with SIFT	3rd International conference on Research Developments in Applied Science,Engineering & Management	3rd International conference on Research Developments in Applied Science,Engineering & Management	International	2018	978-93-87793-43-9	MGMs College of Engineering, Nanded	AEM-2018
22	Anita Kuncjan, D. J. Tupttewar, S. S, Anwar and S. P. Bandewar		Sliding Discrete Fourier Transformfor 2D Signal Processing	International Conference on ISMAC in computational vision and bio-engineering	ISMAC-CVB	International	2018	978-3-030-00664-8	MGMs College of Engineering, Nanded	Springer

Dr. A. M. Rajurkar
NAAC Criteria III Coordinator

Dr. M. G. Harkare
IQAC Coordinator

Dr. Geeta S. Lathkar
Director

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

3.3.2.1. **Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years**

HEI modified Input:

2022-23	2021-22	2020-21	2019-20	2018-19
2	7	4	4	5

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09 - 10, February 2023 | Coimbatore, Tamil Nadu, INDIA

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This certificate is presented to

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MGM College of Engineering ,
Nanded , Maharashtra ,
India

for presenting the research paper entitled "Finite Element Analysis of laser welding of 304L butt joint" in the 2023 International Conference on Advanced Technologies in Chemical, Construction and Mechanical Sciences (ICATCHCOME 2023) held at KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India during 09 - 10, February 2023. The Conference has been organized by the Center for Research and Development (CfRD), KPR Institute of Engineering & Technology.

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Certificate

This certificate is presented to

G. S. Lathkar

MGM College of Engineering ,
Nanded , Maharashtra ,
India

for presenting the research paper entitled “Finite Element Analysis of laser welding of 304L butt joint” in the 2023 International Conference on Advanced Technologies in Chemical, Construction and Mechanical Sciences (ICATCHCOME 2023) held at KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India during 09 - 10, February 2023. The Conference has been organized by the Center for Research and Development (CfRD), KPR Institute of Engineering & Technology.

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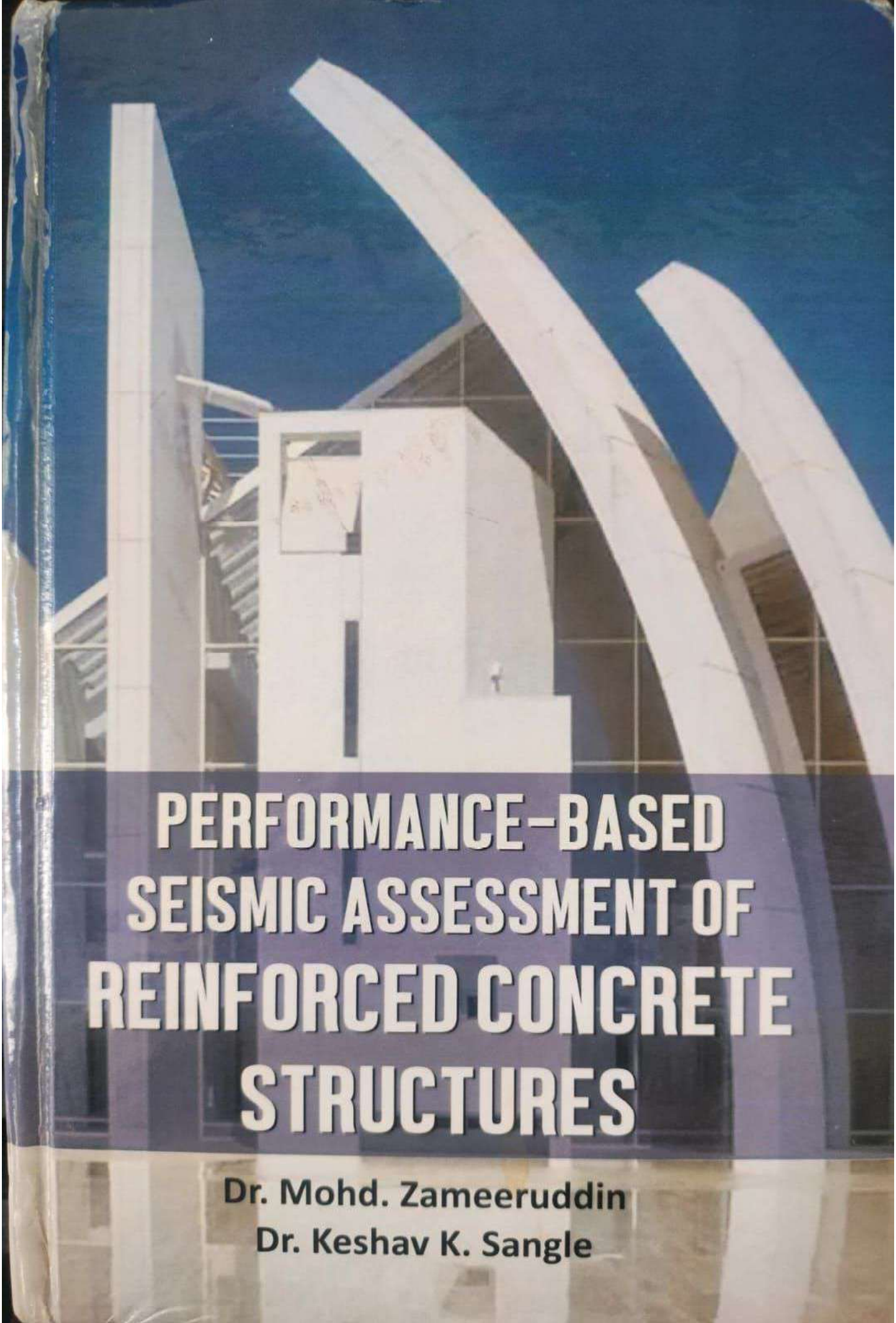

PERFORMANCE-BASED SEISMIC ASSESSMENT OF REINFORCED CONCRETE STRUCTURES

Dr. Mohd. Zameeruddin
Dr. Keshav K. Sangle

An Investigation into Carbon/Epoxy Composites for Conceptual Design of Automobile Vehicle Under Various Loads

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MGM College of Engineering Nanded, India

**rehman_ai@mgmcen.ac.in*

Abstract

In this study the finite element analysis of CFRP square beam, which is used for chassis have been studied using bending and torsion loading cases. Total 8 sequences have been studied using ANSYS software. According to the Tsai–Wu failure theory and the results of reserve factor (strength to stress ratios) the fiber direction and stacking sequence design for square section beam have been discussed. Based on the finite element analysis it is observed that the stacking sequences [0/90/45/-45]s , [-45/45/0/90]s and [90/0/0/90]s are the better for the composite structural members of a vehicle.

Keywords. Carbon fiber reinforced polymer, stacking sequence, finite element analysis, automotive, lightweight Design.

1. INTRODUCTION

Composite material consists of fibre and matrix materials which are used in automotive industries because of its high strength to weight ratio, high impact strength, and low density and flexible in the design. Understanding the structural behaviour of composite materials with the complicated geometrical profiles under various loading situations is a challenging task. Different FEA software like ANSYS, ABAQUS, NASTRAN etc predicts the behaviour of the structure efficiently in terms of stresses and deformations. Finite element analysis is very challenging when designing an anisotropic material like carbon-glass fibre reinforced members which is used for a vehicle [1-6.

Many researchers have made attempts to understand the structural behaviour of composites, using FEA software and to replace the existing metallic automotive components with Fiber Reinforced Plastic (FRP) composites [1-10]. Finite element analysis predicted well the stress distribution and failure stress of the critical regions observed during experimental tests. Composite monocoque chassis analysed using finite element analysis on the geometry and laminate lay-ups of a chassis [1]. Optimal stacking sequence determined according to the maximum stress theory and the results of strength to stress ratios [2]. Finite element analysis of simplified part samples have been carried out under various loads. By calibrating the test sample at the coupon and element level, it is possible to predict the structural response at a higher structural level [3]. The damage behaviour of an aluminium–composite hybrid beam under three point bending loading was investigated by a finite element analysis [4]. Different

Early Detection of Grape Stem Borer Using IoT

Kainjan Sanghavi[1(✉)] and A. M. Rajurkar[2]

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Abstract. Grape stem borer is a serious threat to grapes due to its severe symptoms and loss of production. Traditional diagnosis of grape stem borer depends upon symptom identification, due to sensitivity limits of identification tools in vineyards. Grape stem borer prime indications are parching and sneering of affected branches. Recognition of the borer in early stages is a most challenging chore. This paper presents a novel system, utilizing sound sensor for detection of stem borer in grape vineyard using Internet of things. Foremost contribution of this work is a technique for early detection of stem borer pest based on IoT through an handheld device. The analytic solution detailed in this paper does not necessitate the farmer or any user to be an IoT expert in order to use it. The accuracy achieved for the identification of grape stem borer is higher than 90%. The system is envisioned to incorporate the significant advancements in communication technologies and wireless sensor networks.

Keywords: Grape stem borer · Grape vineyard · Internet of things (IoT) · Early detection · Grape diseases

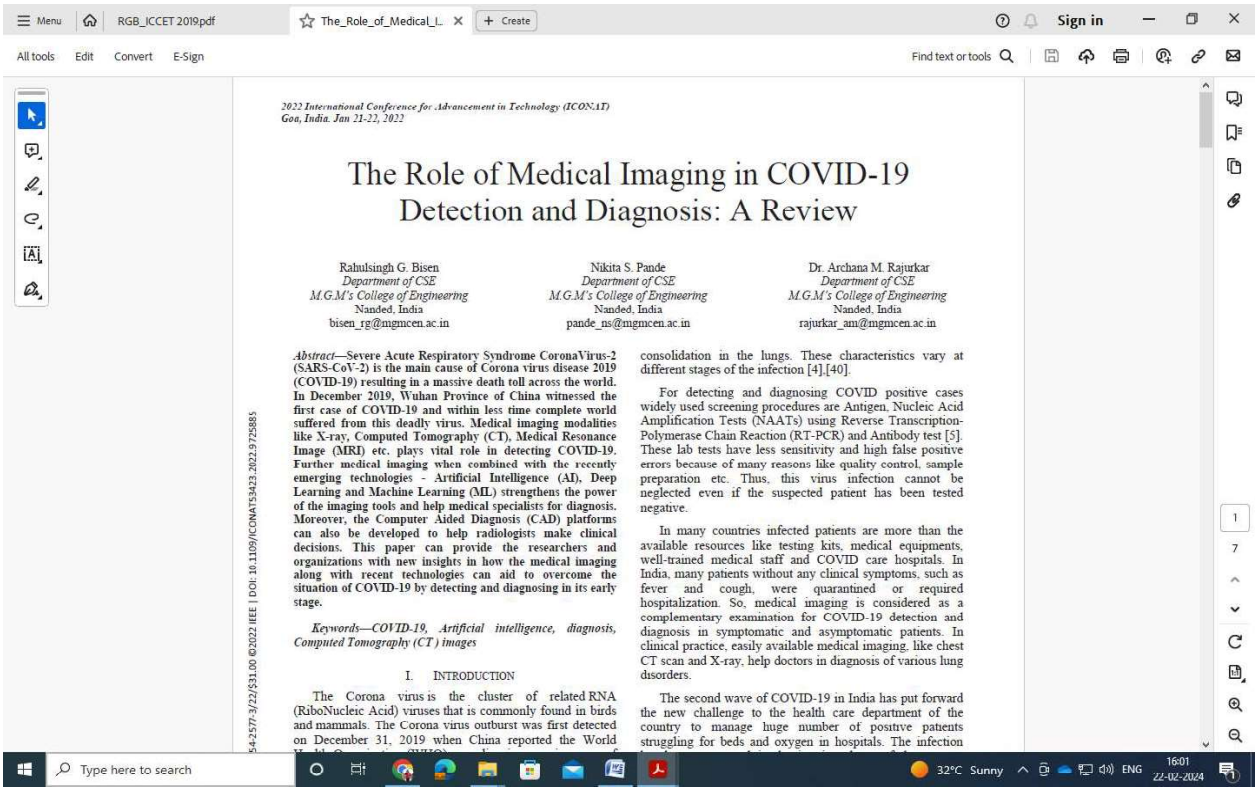
1 Introduction

Grape is a vital ephemeral, climatic produce, enormously grown in India. Maharashtra accounts for 70% of India's total grape acreage and 63% of production. It is confronted by approximately 100 insect pests, which advances different types of damages to the grape vineyards. Amongst them, grape stem borer is a stern pest that is becoming one of the restraining causes in grape farming, mostly in Nashik district [1]. Recently, IoT-based systems are used for remote monitoring of objects [2].

Grape stem borer was previously considered to be a problem only in longstanding and deserted vineyards. Nevertheless, extreme occurrence of this pest is observed in even one-year-old grape grounds in topical years. The disease caused by this pest causes damage which is initially invisible to the naked eye. If there is 1 ha of land, then the general farmer obtains 10 lac income for export. Nevertheless, if the farm is contaminated with this pest, there is a loss of approximately 3.75 lacs per hectare in the exportation of grapes.

Extreme boring can eradicate the plant through the casing. The damage can lessen the amount of rudders for reproduction. When the contamination is late, the white

P. Deshpande et al. (eds.), *Next Generation Information Processing System*,
Advances in Intelligent Systems and Computing 1162,
https://doi.org/10.1007/978-981-15-4851-2_22



2022 International Conference for Advancement in Technology (ICONAT)
Goa, India. Jan 21-22, 2022

The Role of Medical Imaging in COVID-19 Detection and Diagnosis: A Review

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***Abstract*—Severe Acute Respiratory Syndrome CoronaVirus-2 (SARS-CoV-2) is the main cause of Corona virus disease 2019 (COVID-19) resulting in a massive death toll across the world. In December 2019, Wuhan Province of China witnessed the first case of COVID-19 and within less time complete world suffered from this deadly virus. Medical imaging modalities like X-ray, Computed Tomography (CT), Medical Resonance Image (MRI) etc. plays vital role in detecting COVID-19. Further medical imaging when combined with the recently emerging technologies - Artificial Intelligence (AI), Deep Learning and Machine Learning (ML) strengthens the power of the imaging tools and help medical specialists for diagnosis. Moreover, the Computer Aided Diagnosis (CAD) platforms can also be developed to help radiologists make clinical decisions. This paper can provide the researchers and organizations with new insights in how the medical imaging along with recent technologies can aid to overcome the situation of COVID-19 by detecting and diagnosing in its early stage.**

***Keywords*—COVID-19, Artificial intelligence, diagnosis, Computed Tomography (CT) images**

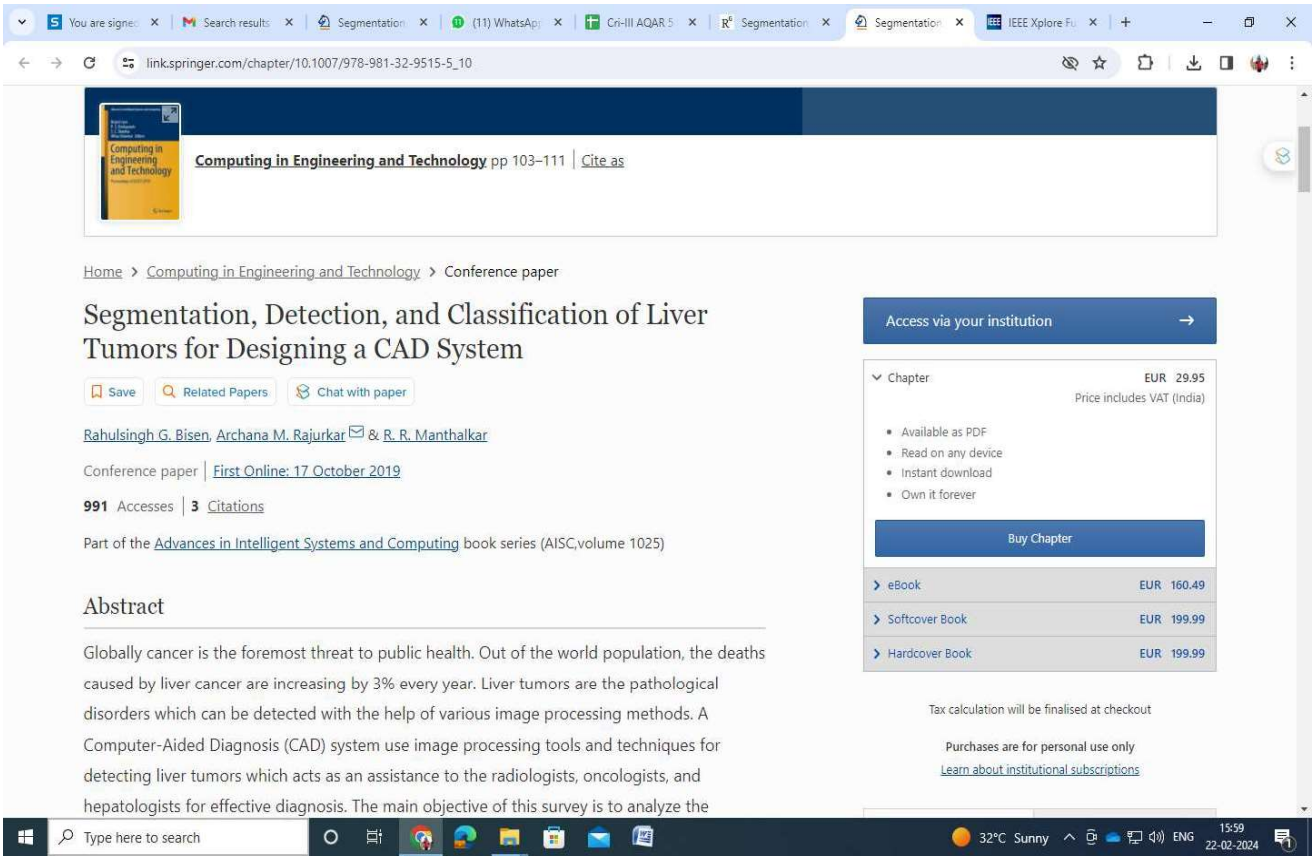
I. INTRODUCTION

The Corona virus is the cluster of related RNA (RiboNucleic Acid) viruses that is commonly found in birds and mammals. The Corona virus outburst was first detected on December 31, 2019 when China reported the World consolidation in the lungs. These characteristics vary at different stages of the infection [4],[40].

For detecting and diagnosing COVID positive cases widely used screening procedures are Antigen, Nucleic Acid Amplification Tests (NAATs) using Reverse Transcription-Polymerase Chain Reaction (RT-PCR) and Antibody test [5]. These lab tests have less sensitivity and high false positive errors because of many reasons like quality control, sample preparation etc. Thus, this virus infection cannot be neglected even if the suspected patient has been tested negative.

In many countries infected patients are more than the available resources like testing kits, medical equipments, well-trained medical staff and COVID care hospitals. In India, many patients without any clinical symptoms, such as fever and cough, were quarantined or required hospitalization. So, medical imaging is considered as a complementary examination for COVID-19 detection and diagnosis in symptomatic and asymptomatic patients. In clinical practice, easily available medical imaging, like chest CT scan and X-ray, help doctors in diagnosis of various lung disorders.

The second wave of COVID-19 in India has put forward the new challenge to the health care department of the country to manage huge number of positive patients struggling for beds and oxygen in hospitals. The infection



Computing in Engineering and Technology pp 103–111 | Cite as

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Segmentation, Detection, and Classification of Liver Tumors for Designing a CAD System

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Rahulsingh G. Bisen, Archana M. Rajurkar & R. R. Manthalkar

Conference paper | First Online: 17 October 2019

991 Accesses | 3 Citations

Part of the Advances in Intelligent Systems and Computing book series (AISC,volume 1025)

Abstract

Globally cancer is the foremost threat to public health. Out of the world population, the deaths caused by liver cancer are increasing by 3% every year. Liver tumors are the pathological disorders which can be detected with the help of various image processing methods. A Computer-Aided Diagnosis (CAD) system use image processing tools and techniques for detecting liver tumors which acts as an assistance to the radiologists, oncologists, and hepatologists for effective diagnosis. The main objective of this survey is to analyze the

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Cyber Security Using Machine Learning Techniques

Manisha A. Manjramkar(✉) and Kalpana C. Jondhale

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Abstract. Machine learning (ML) is a subfield of Artificial Intelligence (AI) that contributes to the development of systems that can learn from previous data, spot patterns, and make logical judgments with little human interaction. Cybersecurity methodologies provide modern security solutions for detecting and responding to threats. As a result of thieves' ability to circumvent traditional security measures, the previously utilized security solutions are no longer enough. Protecting digital systems from hostile assaults, including those on computers, servers, mobile devices, networks, and associated data, is the practice of cyber security. Accounting for cyber security where machine learning is used and using ML to enable cyber security are the two main components of combining cyber security and ML. We may benefit from this union in a number of ways, including by giving ML models better security, enhancing the effectiveness of cyber security techniques, and enabling the efficient detection of zero-day threats with minimal human involvement. We combine cyber security and ML to address two distinct themes in this survey article. By providing ML strategies for cyber security, the purpose of this paper is to give a wide overview of ML methods employed in cyberspace security.

Keywords: Cyber security · Artificial Intelligence · Intrusion detection · Malware · spam

1 Introduction

The amount of time spent on the Internet has significantly grown because to advancements in computer system, internet and smart phone. Millions of various networked computers, networks, and related devices make up the global Internet. As a result, online criminals and adversaries now have the Internet as a target. Information confidentiality, availability, and integrity must all be guaranteed via a solid, secure computer system. When an unauthorized individual, software, or unlawful breach accesses a system or network with the aim to cause harm or interfere with regular operations, the computer system's authenticity and privacy are seriously compromised [1]. Cybersecurity refers to a set of safeguarding practices that may be used to secure the digital environment and user activities against unwanted access and assaults.

S. Tamane et al. (Eds.): ICAMIDA 2022, ACSR 109, pp. 693–701, 2023.
https://doi.org/10.2991/978-94-6463-158-4_59

A Biometric system is a pattern recognition system. It operates by acquiring biometric data from an individual, extracting a feature set from the acquired data, and comparing this feature set against the template set in the database. A number of Biometric characteristics exist and are in use in various applications. Each Biometric has its strengths and weaknesses, and the choice depends on the application. The match between a specific Biometric with an application is determined depending upon the operational mode of the application and the properties of the Biometric characteristic. Research in automated face recognition has been conducted since the 1960s. The reliability of face recognition schemes still poses a great challenge to the scientific community. Face recognition has several advantages over other biometric techniques. Face recognition is natural, non-intrusive and easy to use since it is based on images recorded by a distant camera and can be very effective even if the user is not aware of the existence of the face recognition system. The increased interest in automated face recognition systems have gained largely due to increasing public concerns for security.

I am **Kalpana Jondhale**, working as Professor and Head, Department of Electronics and Telecom Engg, at MGMCEN, India.
The current FR systems does not support identification in controlled environments, especially in crowd situations. Scope is to extend the FR system to more difficult environment in public security and crowd surveillance.

978620437874

Human FR using FSVD and RBF Neural Net

Kalpana Jondhale, Laxman Waghmare

Kalpana Jondhale
Laxman Waghmare

Human Face Recognition using FSVD and RBF Neural Network

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CERTIFICATE

This is to certify **Mohd. Zameeruddin** of **MGM's college of Engineering, Nanded** has presented the paper titled "Review of Recent developments in the Damage-based Seismic Performance Evaluation of Reinforced Concrete Structures" in AICTE sponsored National Conference on **Multidisciplinary Research and Innovation-21 (NCMRAI-21)** organized by Department of Electronics and Telecommunication Engineering, Sipna College of Engineering & Technology, Amravati held during 28-29 January 2022.

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International Conference on Cognition and Recongition

ICCR 2021: **Cognition and Recognition** pp 366–379

Self-embedding and Variable Authentication Approach for Fragile Image Watermarking Using SVD and DCT

B. S. Kapre, A. M. Rajurkar & D. S. Guru

Conference paper | First Online: 01 January 2023

Part of the Communications in Computer and Information Science book series (CCIS,volume 1697)

Abstract

In this paper, we propose a self-embedding fragile image watermarking technique based on Singular Value Decomposition (SVD) and Discrete Cosine Transform (DCT). To improve security and robustness a novel block separation technique is presented in which an input image is divided into non-overlapping blocks and subsequently SVD is applied on each

International Conference on Cognition and Recongition

ICCR 2021: **Cognition and Recognition** pp 352–365

Selected Deep Features and Multiclass SVM for Flower Image Classification

M. R. Banwaskar, A. M. Rajurkar & D. S. Guru

Conference paper | First Online: 01 January 2023

Part of the Communications in Computer and Information Science book series (CCIS,volume 1697)

Abstract

Flower classification and recognition is an exciting research area because extensive variety of flower classes have similar colour, shape and texture features. Most of the existing flower classification systems use a combination of visual features extracted from flower images followed by classification using supervised or unsupervised learning methods. Classification accuracy of these

Robust and Secure Lucas Sequence-Based Video Watermarking

| Conference paper | First Online: 29 July 2020

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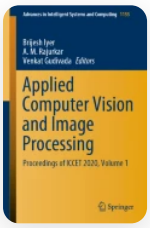

Applied Computer Vision and Image Processing

Bhagyashri S. Kapre & Archana M. Rajurkar

Part of the book series: Advances in Intelligent Systems and Computing ((AISC,volume 1155))

Abstract

Currently, video copyright protection has become a challenging issue due to the growth of Internet technology and extensive use of multimedia. Digital watermarking plays an important role in protecting multimedia objects as they become easier to modify, copy and exchange data. Embedding the watermark in the video is done in different ways by many researchers. Most of the existing video watermarking (V-W) schemes directly apply image watermarking methods to raw and compressed video. Due to redundancy in the

An inside and out investigation of cloud-fog processing: design, application areas with security highlights

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Abstract: Fog figuring is a well known new term in the realm of comprehension after the approach of PCs. This thought of another universe of memberships can be viewed as an augmentation of PC use. The essential purpose of getting mist is to lessen the load in the cloud with a suitable degree of local area occasions close by, executives, applications, and huge subtleties close to the furthest limit of the organization. In this audit paper, we will examine the chief ascribes of God, in particular; 1.Mobility, 2.Location mindedness, 3.Lileness, 4.A enormous number of centers, 5.Broad geographic portion, 6. Different applications routinely and we research the center focuses and advancement of Fog enlistment, and afterward abrogate its IoT programs.

Segmentation, Detection, and Classification of Liver Tumors for Designing a CAD System

Rahulsingh G. Bisen, Archana M. Rajurkar and R. R. Manthalkar

Abstract Globally cancer is the foremost threat to public health. Out of the world population, the deaths caused by liver cancer are increasing by 3% every year. Liver tumors are the pathological disorders which can be detected with the help of various image processing methods. A Computer-Aided Diagnosis (CAD) system use image processing tools and techniques for detecting liver tumors which acts as an assistance to the radiologists, oncologists, and hepatologists for effective diagnosis. The main objective of this survey is to analyze the available techniques that can aid in developing or designing a CAD system for liver tumors. Various methods and outcome of available techniques for segmentation, detection and classification of liver tumors from Computed Tomography (CT) or Dynamic Contrast-Enhanced Magnetic Resonance (DCE-MR) images are discussed and compared in detail.

Keywords Medical imaging · Computed Tomography (CT) images · Dynamic Contrast Enhanced-Magnetic Resonance (DCE-MR) images · Liver tumors

1 Introduction

The largest internal organ in our body that carries out important life sustaining tasks such as detoxification and storage of vitamins in the body is liver. Liver tumors are pathological disorders which can be detected by image processing techniques and this information utilized to develop a novel Computer-Aided Diagnosis (CAD) system. It can also assist radiologists to diagnose liver malignancy and oncologists to plan the treatment or surgery. Designing an effective CAD system is the emerging

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Optimal Tree Structure for Secure Group Communication Using LKH Approach

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Abstract

In secure Group communication for applications such as pay per view, teleconferencing, and video conferencing, key management method with logarithmic computation, storage time and bandwidth efficiency is expected. Major aspects with key management are initializing the group with a group key and rekeying the group. Server maintains a key tree. Rekeying is mandatory due to dynamic group nature (join/leave operations) or periodic rekeying. Logical Key Hierarchy has logarithmic rekeying cost if the key tree is balanced, over multiple rekeying operations key tree is not balanced and LKH yields worst Rekeying cost. To achieve logarithmic cost either keep key tree balanced or restructure the key tree in such a way that it will still result in best rekeying cost. This paper explores tree structures using Logical Key Hierarchy (LKH) approach to find optimal tree structure for an application.

Keywords- Secure multicast, Rekeying, LKH, forward secrecy, backward secrecy, optimal tree structure, NSBHO tree, AVL tree, optimal level homogeneous tree

1. Introduction

(In Group Communication multiple receivers receive same copy of transmission at the same time when sender has sent just one copy of data. In secure group communication only intended and authorized users (receivers and sender/s) should send and receive data and others should be prohibited to take part in communication. To achieve this group key is used for all communication, but due to change in group dynamics, group key has to be changed or regenerated to ensure backward and forward secrecy. Change in group key is called as rekeying. Rekeying happens due to result of join/leave operation or periodic time interval (batch rekeying).

Let's assume there is a trusted server to store membership information (for group access). When a user sends join request to the group, group server using authentication protocol mutually authenticates user. With the list

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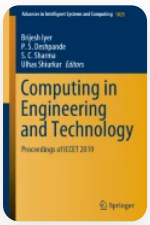
Enhanced Strict Binary Logical Key Hierarchy Algorithm for Secure Group Communication

| Conference paper | First Online: 17 October 2019

| pp 239–251 | Cite this conference paper



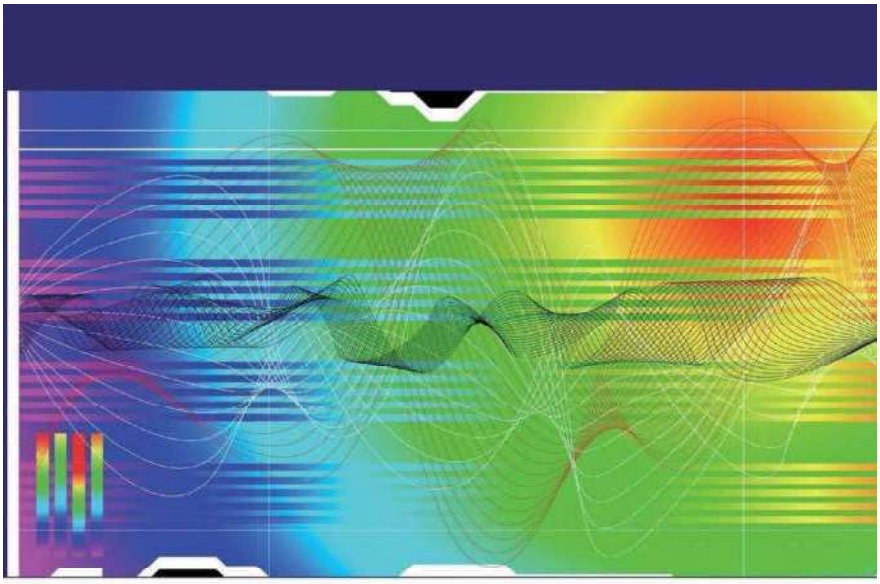
Computing in Engineering and Technology

Aparna S. Pande, Yashwant V. Joshi & Manisha Y. Joshi

Part of the book series: Advances in Intelligent Systems and Computing ((AISC,volume 1025))

Abstract

Logical Key Hierarchy is a scalable and efficient method to achieve logarithmic rekeying cost in secure group communication. In applications like pay per view, video conferencing with multiple rekeying operations, the key tree will be unbalanced and will generate worst-case rekeying cost. With each join, leave operation we change the group key as well as update all keys along the key path of join/leave user. Key aspect in secure group communication is maintaining a balanced key tree and achieving logarithmic rekeying



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Modified Double Bilateral Filter for Sharpness Enhancement and Noise

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A Discriminative Model for Age Invariant Face Recognition

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The discriminative model is developed to address face matching in the presence of age variation. In this approach, each face is represented by designing a densely sampled local feature description scheme, in which Scale Invariant Feature Transform (SIFT) and Multi-scale Local Binary Patterns (MLBP) serve as local descriptors. Since both SIFT-based local features and MLBP-based local features span a high- dimensional feature space, an algorithm called multi-feature discriminant analysis (MFDA) is used to process these two local feature spaces in a unified framework. The new proposed method is discriminative model with multi-scale robust local binary pattern (MRLBP). MLBP is not so robust to the noise present in the image. The proposed method uses MRLBP which serve as the local descriptor in the discriminative model to enhance the performance.

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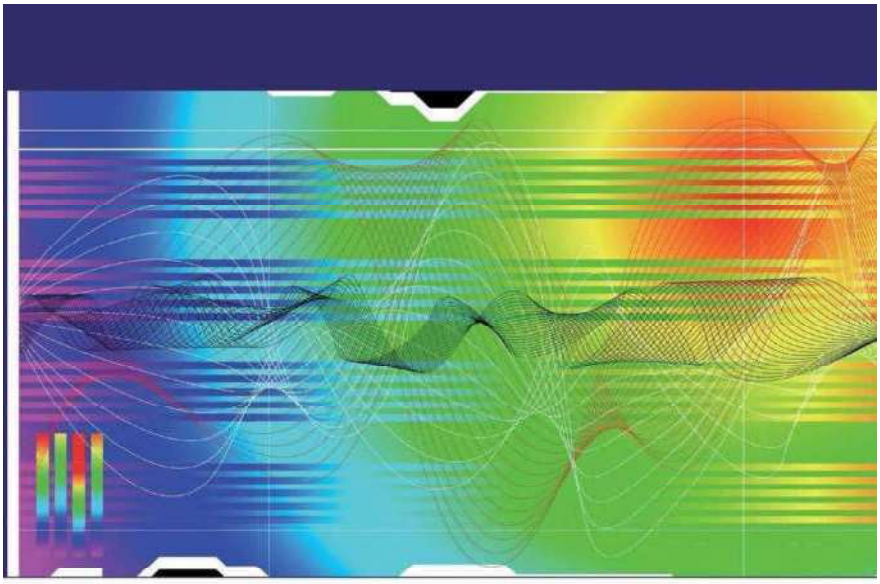

Archana Harsing Sable
Haricharan Dhirbasi
Kalpana Jondhale

Modified Double Bilateral Filter for Sharpness Enhancement and Noise

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Survey of Diabetic Retinopathy Screening Methods

Manisha Manjramkar All Authors

Abstract: This electronic document iDiabetic retinopathy is an abnormality which involves the small blood vessels that targets the central region like macula. It is a progressive d... **View more**

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Abstract:
This electronic document iDiabetic retinopathy is an abnormality which involves the small blood vessels that targets the central region like macula. It is a progressive disease and main reason that causes loss in vision. Diabetic retinopathy is a vascular illness of the retina which influences patients with diabetes. This harms the retina of eye and leads to visual impairment if level of diabetes is very high. Diabetic retinopathy has no early signs. In some cases vision will get better or worse during the day. So the importance of automatic assessment of macular enema increased. In this paper we have done a survey on the different techniques used for detection diabetic retinopathy. Diabetic retinopathy is composed of a characteristic group of lesions found in the retina of one having diabetes for several years. Detecting the exudates in early stage can prevent vision loss.

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Introduction

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DRLBP based edge texture features for Object Recognition with SIFT

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ABSTRACT

Category recognition system will be developed for application to image retrieval. This paper proposes two sets of novel edge-texture features, Discriminative Robust Local Binary Pattern (DRLBP) and Ternary Pattern (DRLTP), for object recognition. By finding the limitations of Local Binary Pattern (LBP), Local Ternary Pattern (LTP) and Robust LBP (RLBP). DRLBP and DRLTP are proposed features by analyzing with HOG and SIFT features for better performance. For classification purpose linear SVM classifier is used. Furthermore, the proposed features retain contrast information necessary for proper representation of object contours that LBP, LTP, and RLBP discard. Our proposed features are tested on CALTECH 256 Data set. Results demonstrate that the proposed features outperform the compared approaches on most data sets.

Keywords- *DRLBP, DRLTP, SIFT, HOG, Feature extraction and SVM*

1. INTRODUCTION

Object recognition is divided in two parts category recognition and detection. Category recognition is used to classify an object into one of several predefined categories. Detection is used to distinguish objects from the background. Typically, objects have to be detected against cluttered, noisy backgrounds and other objects under different illumination and contrast environments. Performance of object recognition can be improved by discriminating the object from the background or other objects in different lightings and scenarios.

Object recognition features are categorized into two groups sparse and dense representations. For sparse feature representations, interest-point detectors are used to identify structures such as corners and blobs on the object. A feature is created for the image patch around each point. Dense feature representations, which are extracted at fixed locations densely in a detection window, are gaining popularity as they describe objects richly compared to sparse feature representations.

LBP is robust to illumination and contrast variations as it only considers the signs of the pixel differences. However, it is sensitive to noise and small fluctuations of pixel values. To handle this, Local Ternary Pattern (LTP) has been proposed. In comparison to LBP, it has 2 thresholds which creates 3 different states as compared to 2 in LBP. It is more resistant to noise and small pixel value variations compared to LBP. LBP and LTP

Sliding Discrete Fourier Transform for 2D Signal Processing

Anita Kuchan, D. J. Tuptewar, Sayed Shoaib Anwar and Sachin P. Bandewar

Abstract Discrete Fourier Transform (DFT) is the most frequently used method to determine the frequency contents of the digital signals. As DFT will take more time to implement, this paper gives the algorithm for the fast implementation of the DFT on the Two-Dimensional (2D) sliding windows. To fast implement DFT on the 2D sliding window, a 2D DFT (here 2D SDFT) algorithm is stated. The algorithm of the proposed 2D SDFT tries to compute current window's DFT bins directly. It makes use of precalculated bins of earlier window. For a 2D input signal, sliding transform is being accelerated with the help of the proposed algorithm. The computational requirement of the said algorithm is found to be lowest among the existing ones. The output of discrete Fourier transform and sliding discrete Fourier transform algorithm at all pixel positions is observed to be mathematically equivalent

1 Introduction

In several applications of image processing, frequency domain offers an improvement over performing a similar job in the time domain. At times the improvement is just simpler or more hypothetical algorithm. Often the largest obscurity in working in frequency domain is concern with calculation of Fast Fourier Transform [1]. If the frequency-domain data must be reorganized constantly in a real-time application, the difficulty and latency of the FFT can become a significant obstruction to achieve system goals and keeping cost and power consumption low.

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