பள்ளு இலக்கியமும் சமுதாயப் பார்வையும்

முனைவர்
அகிலா சிவசங்கர்

தாரிணி பதிப்பகம்

முனைவர்
அகிலா சிவசங்கர்

பள்ளு இலக்கியமும் சமுதாயப் பார்வையும்
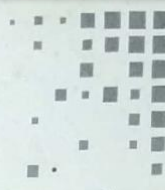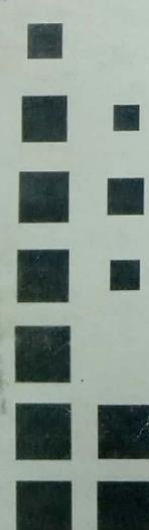
IEEE

Book of Abstracts

IEEE International Conference on Communication and Electronics Systems (ICCES 2016)

Organized by

PPG Institute of Technology, Coimbatore, India
and
Confyy, India

21- 22 October 2016

Sponsors

ELECTRON DEVICES SOCIETY®

Effect of Interconnect Parasitic Variations on Circuit Performance Parameters

C. Venkataiah, Research Scholar, Department of ECE
JNTUK, Kakinada, 533003, Andhra Pradesh, India
venki.challa@gmail.com

Dr. K. Satya Prasad, Professor, Department of ECE
JNTUK, Kakinada, 533003, Andhra Pradesh, India
prasad_kodati@yahoo.co.in

Dr. T. Jaya Chandra Prasad, Principal, RGMCET
Nandyala, Kurnool (dis), 518501, Andhra Pradesh, India
jp.talari@gmail.com

Abstract— Interconnects are integral part in the chip design which plays a major role in circuit performance in DSM technology. Due to the presence of parasitic such as Resistance, Capacitance components, signal degradation and delayed problems may occur. Now days because of technological advances, number of nodes increasing in circuits, there by introducing more parasitic in multi nodes which will effect on the circuit performance in terms of delay and power. With this motivation, here we have presented simulation analysis of the effect of interconnects due to parasitic and load on the circuit performance parameters in various DSM technologies. All simulations have done by considering the simple RC interconnect with a driver and load concepts. For the simulated interconnect model with variable lengths, delay and PDP values are estimated. The performance metrics indicates, there is a liner increment with change in load, 5 to 10% variations in same technology for variable lengths of interconnect and 40 to 50% variation in different technologies.

Index Terms—VLSI, Interconnect, Parasitic, Cu, power, delay, PDP

Effective Design of a Parametrical Security Model for Digital Signatures Using Cryptography

Mrs. B.Anandapriya,
Dept. of B.C.A, Patrician College, Chennai, India.
priya76_jagan@yahoo.co.in
Dr.(Mrs.) Ananthi Sheshasaayee,
Head, Dept. of Comp. Science, Quid – e –Millath College, Chennai, India

27

Abstract -- Digital signature authentication scheme provides secure communication between two users. A valid digital signature gives a recipient reason to believe that the message was created by a known sender, such that the sender cannot deny having sent the message (authentication and non-repudiation) and that the message was not altered in transit (integrity).The focus of this paper is to discuss how to protect communications that occur in a transaction so as to guide against fraudsters and in other cases where it is important to detect forgery or tampering.

An Efficient Model to Limit Vehicle Speed using Wireless Technology

Srivas M C, Akshay R S Ashwin Krishna, Rajeshwari Hegde
Department of Telecommunication Engineering,
BMS College of Engineering Bengaluru, Karnataka 560019
sriv95@gmail.com, akshay7c@gmail.com,ashwinpresidency@gmail.com,
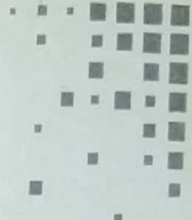rajeshwari.hegde@gmail.com

Abstract— In any urban area with public amenities like schools, hospitals, parks, etc. which see a lot of footfall, there are innumerable cases of accidents happening due to speeding vehicles. Now, despite traffic signs highlighting the need for caution, it is apparent that motorists are willing to sacrifice their own safety and others' just to get to their destination on time. The problem which we face is that vehicles in sensitive public zones do not limit their speed, thereby endangering the lives of pedestrians and fellow motorists. An effective solution we have come up with is a system which will automatically detect and reduce the speed of the vehicles and maintain it under a limit in the specified zone. This is done by integrating a wireless module in the Electronic Control Unit i.e. ECU, and providing a network for the school/hospital, we can create a system that checks the speed of vehicles when in range of the network. The system in the car is linked to the throttle valve, which in turn will reduce the speed of the vehicle.
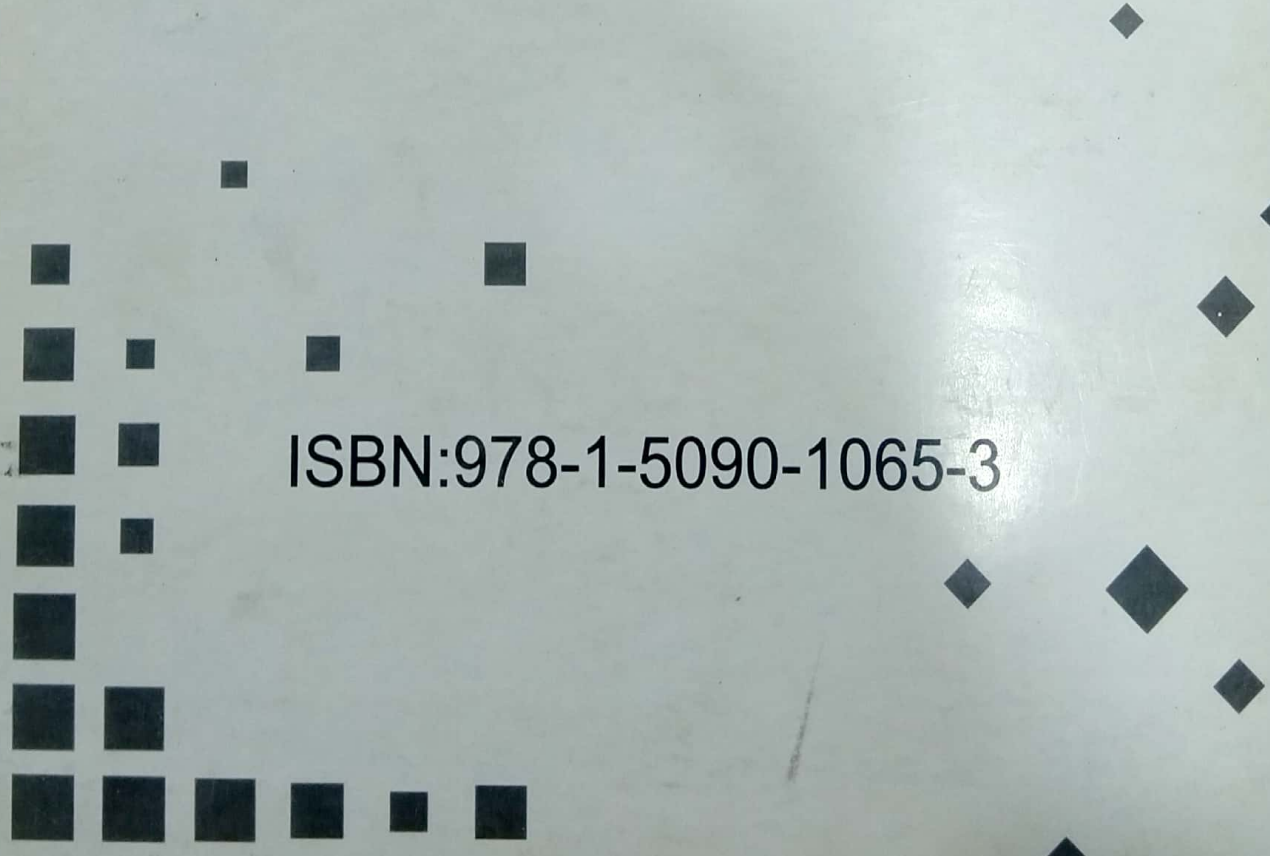
A Scheme For Detecting the Types of Misbehavior and Identifying the Attacks using Reputation Mechanism in a Mobile Ad-hoc Network

Pournami Maheshwaran, Sangeetha Rajagopal
Depart. of Electronics & Telecomm.Engineering Pillai HOC College of Engineering and Technology
Raigad, Maharashtra, India. 410206
Email: pournami.m@gmail.com, sangeetharaj18@gmail.com

Abstract—Security in mobile ad-hoc networks is the key issue because the individual nodes in the network are operated without any centralized authority. External and internal attacks are possible on the network. Different types of potential threats to network are persistently developing and in order to battle them back, we need to at least know them theoretically so that with the rise of wireless networks, the security arrangements turn out to be flawlessly coordinated and more adaptable. Within a short span of time, networks have grown in both size

28

IEEE International Conference on Communication and Electronics Systems (ICCES 2016)

Florentin Smarandache, Surapati Pramanik

(Editors)

New Trends
in Neutrosophic Theory
and Applications

J. Martina Jency, I. Arockiarani

Department of Mathematics, Nirmala College for Women, Coimbatore, Tamilnadu, India.

Hausdorff Extensions in Single Valued Neutrosophic

S* Centered Systems

Abstract

This paper explores the concept of single valued neutrosophic S* open sets in single valued neutrosophic S* centered system. Also the characterization of Hausdorff extensions of spaces in single valued neutrosophic S* centered systems are established.

Keywords

Single valued neutrosophic set, single valued neutrosophic structure space, single valued neutrosophic S* centered system, single valued neutrosophic S*θ− homeomorphism, single valued neutrosophic S*θ− continuous functions.

1. Introduction

Florentin Smarandache [8, 9] combined the non- standard analysis with a tri component logic/set, probability theory with philosophy and proposed the term neutrosophy which means knowledge of neutral thoughts. This neutral represents the main distinction between fuzzy and intuitionistic fuzzy logic set. In 1998, Florentin Smarandache defined the neutrosophic set [8, 9]. Florentin Smarandache and his colleagues [5] presented an instance of neutrosophic set, called single valued neutrosophic set. Alexandrov [1] developed a method of centered systems for studying compact extensions of topological spaces. The method of centered systems in topological spaces was studied by Iliadis [6] and in fuzzy topological spaces by Uma et al. [10]. We extend the same in single valued neutrosophic topological spaces.

2. Preliminaries

Definition 2.1. [5]

Let X be a space of points (objects), with a generic element in X denoted by x. A single valued neutrosophic set (SVNS) A in X is characterized by truth-membership function T_A, indeterminacy-membership function I_A and falsity-membership function F_A.

327

Neutrosophic theory and applications have been expanding in all directions at an astonishing rate especially after the introduction the journal entitled "Neutrosophic Sets and Systems". New theories, techniques, algorithms have been rapidly developed. One of the most striking trends in the neutrosophic theory is the hybridization of neutrosophic set with other potential sets such as rough set, bipolar set, soft set, hesitant fuzzy set, etc. The different hybrid structure such as rough neutrosophic set, single valued neutrosophic rough set, bipolar neutrosophic set, single valued neutrosophic hesitant fuzzy set, etc. are proposed in the literature in a short period of time. Neutrosophic set has been a very important tool in all various areas of data mining, decision making, e-learning, engineering, medicine, social science, and some more.

The Book "New Trends in Neutrosophic Theories and Applications" focuses on theories, methods, algorithms for decision making and also applications involving neutrosophic information. Some topics deal with data mining, decision making, e-learning, graph theory, medical diagnosis, probability theory, topology, and some more.

Florentin Smarandache, Surapati Pramanik
(Editors)

New Trends
in Neutrosophic Theory
and Applications

Pons Editions

SAEID JAFARI¹, I. AROCKIARANI², J. MARTINA JENCY³

1 College of Vestajaelland South,Herrestraede 11,4200, Slagelse, Denmark.
2,3* Department of Mathematics, Nirmala College for women, Coimbatore, Tamilnadu, India.
3* E-mail: martinajency@gmail.com

The Alexandrov-Urysohn Compactness On Single Valued Neutrosophic S*Centered Systems

Abstract

In this paper we present the notion of the single valued neutrosophic S^* maximal compact extension in single valued neutrosophic S^* centered system. Moreover, the concept of single valued neutrosophic S^* absolute is applied to establish the Alexandrov -Urysohn compactness criterion. Some of the basic properties are characterized.

Keywords

Single valued neutrosophic S^* centered system, single valued neutrosophic S^*0- homeomorphism, single valued neutrosophic S^*0- continuous functions.

1. Introduction

Florentin Smarandache [9] combined the non- standard analysis with a tri component logic/set, probability theory with philosophy and proposed the term neutrosophic which means knowledge of neutral thoughts. This neutral represents the main distinction between fuzzy and intuitionistic fuzzy logic set. In 1998, Florentin Smarandache [6] defined the single valued neutrosophic set involving the concept of standard analysis. Stone [10, 11] applied the apparatus of Boolean rings to investigate spaces more general than completely regular ones, related to some extent to the function-theoretic approach. Using these methods tone [10, 11] obtained a number of important results on Hausdorff spaces and in fact introduced the important topological construction that was later called the absolute. The first proof of Alexandrov-Urysohn compactness criterion without any axiom of countability was given by Stone [10, 11].Cech extension in topological spaces and Alexandrov-Urysohn compactness criterion were constructed by Iliadis and Fomin[7].

Neutrosophic theory and applications have been expanding in all directions at an astonishing rate especially after the introduction the journal entitled "Neutrosophic Sets and Systems". New theories, techniques, algorithms have been rapidly developed. One of the most striking trends in the neutrosophic theory is the hybridization of neutrosophic set with other potential sets such as rough set, bipolar set, soft set, hesitant fuzzy set, etc. The different hybrid structure such as rough neutrosophic set, single valued neutrosophic rough set, bipolar neutrosophic set, single valued neutrosophic hesitant fuzzy set, etc. are proposed in the literature in a short period of time. Neutrosophic set has been a very important tool in all various areas of data mining, decision making, e-learning, engineering, medicine, social science, and some more.

The Book "New Trends in Neutrosophic Theories and Applications" focuses on theories, methods, algorithms for decision making and also applications involving neutrosophic information. Some topics deal with data mining, decision making, e-learning, graph theory, medical diagnosis, probability theory, topology, and some more.

IEEE

Bangalore Section

IEEE - International Conference
on
Innovative Mechanisms for Industry Applications
(ICIMIA-2017)

Technically sponsored by IEEE Bangalore Section, India

Book of Abstracts

21st- 23rd February, 2017

Organized by

Dayananda Sagar College of Engineering Bengaluru

(An Autonomous Institute Affiliated to VTU, Approved by AICTE & ISO 9001:2008 certified)
(Accredited by National Assessment & Accreditation council (NAAC) with 'A' grade)

Digital Signatures Security Using Cryptography for Industrial Applications

Dr.(Mrs.) Ananthi Sheshasaayee(Research Guide), Associate Prof & Head, PG & Research Dept. of Comp. Science, Quaid – e –Millath Govt.College For Women, Chennai.
Mail Id: ananthi.research@gmail.com
Mrs. B.Anandapriya,(Research Scholar),SCSVMV University, Kanchipuram, India.
Mail id : anandhapriya.research@gmail.com

Abstract – Digital signature confirmation conspire gives secure correspondence between two clients. A legitimate advanced mark gives a beneficiary motivation to trust that the message was made by a known sender, with the end goal that the sender can't deny having sent the message (confirmation and non-renouncement) and that the message was not adjusted in travel (integrity).The center of this paper is to talk about how to secure correspondences that happen in an exchange in order to direct against fraudsters and in different situations where it is vital to recognize fabrication or altering.transaction so as to guide against fraudsters and in other cases where it is important to detect forgery or tampering.

Keywords: digital signatures, Key Pair Generator, Encryption, Decryption, Secure Electronic Transaction, Electronic Commerce, Hash functions and RSA.

Effect of Composite Biodiesel of Pongamia – Waste Cooking oils and its Diesel Blends on Performance and Emission Characteristics of C I Engine

Tilak.S.R, Department of Mechanical Engineering, Sapthagiri College of Engineering, Bangalore, Karnataka, India. tilaksr.raghunath@gmail.com
K.Chandrashekara, H.Yogish
Department of Mechanical Engineering, Sree Jayachamarajendra College of Engineering, Mysore, Karnataka, India.

Abstract -The Pongamia and waste cooking oils are the main non-edible oils for biodiesel production in India. The aim of the present work is to evaluate the fuel properties and investigate the impact on engine performance using composite oil of Pongamia and waste cooking biodiesel of various proportions of 60:40, 70:30, 80:20 and their ternary blend with diesel of B10, B20, B30, B40. The result of the test showed that brake specific fuel consumption for composite oil of Pongamia biodiesel and waste cooking biodiesel 70:30 of blend B20 is higher than diesel due to their lower energy content compared to all other blends. The brake thermal efficiency of ternary blend and diesel is comparable while the Pongamia and waste cooking biodiesel have higher efficiency. The result of the investigation showed that ternary blend can be developed as alternate fuels.

Keywords- Composite oil; Biodiesel; Transesterification.

IEEE - International Conference
on
Innovative Mechanisms for Industry Applications (ICIMIA 2017)

V. Madhu
A. Manimaran
D. Easwaramoorthy
D. Kalpanapriya
M. Mubashir Unnissa
Editors

Advances in Algebra and Analysis

International Conference on
Advances in Mathematical Sciences,
Vellore, India, December 2017 -
Volume I

Birkhäuser

Editors

V. Madhu
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

A. Manimaran
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

D. Easwaramoorthy
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

D. Kalpanapriya
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

M. Mubashir Unnissa
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

Dynamics of Stochastic SIRS Model

R. Rajaji

Abstract This article presents a SIRS epidemic model with stochastic effect. For the stochastic version, we prove the existence and uniqueness of the solution of this stochastic SIRS model. In addition, sufficient conditions for the stochastic stability of equilibrium solutions are provided. Finally, numerical visualization is presented to justify our results.

1   Introduction

Mathematical modeling is an important tool used in analyzing the spread of infectious diseases. One of the vital models in epidemiological patterns and disease control is SIR model. Kermack and McKendrick [5] initially suggested and analyzed the deterministic SIR model. After that, many authors have examined the deterministic SIRS model [2, 9].

The deterministic SIRS model can be written as

$$
\begin{aligned}
\frac{d\alpha}{dt} &= l - b\alpha\beta - m\alpha + c\gamma, \\
\frac{d\beta}{dt} &= b\alpha\beta - (k + m + a)\beta, \\
\frac{d\gamma}{dt} &= k\beta - (m + c)\gamma.
\end{aligned}
\tag{1}
$$

where $\alpha(t)$, $\beta(t)$, and $\gamma(t)$ denote the number of susceptible, infective, and recovered individuals at time t, respectively, l is the recruitment rate of the population, m is the natural death rate, a is the death rate due to disease, b is the infection coefficient, k is the recovery rate of the infective individuals, and c is the rate at which recovered individuals lose immunity and return to the susceptible class.

R. Rajaji (✉)
Department of Mathematics, Patrician College of Arts and Science, Chennai, India
e-mail: rajajiranga@gmail.com

Proceedings of International conference on

Technological Advances in Mechanical Engineering

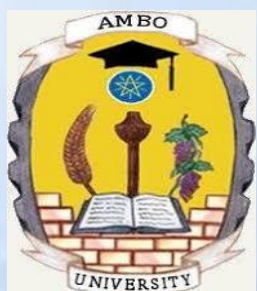Jointly Organised by AMET, Chennai, India & AMBO University, Ethiopia, East Africa.

ICTAME
2018

www.ictame.com

STEERING QUALITY EDUCATION

AMET

Published by
Department of Mechanical Engineering
AMET, Chennai, India.

AMBO UNIVERSITY

Proceeding of
International Conference on
Technological Advances in Mechanical Engineering

DISCLAIMER

The authors are solely responsible for the contents of the papers compiled in this volume. The publishers or editors do not take any responsibility for the same in any manner. Errors if any are prely unintentional and readers are requested to communicate such errors to the editors or publishers to avoid discrepancies in future.

EDITORS

Dr. R. Rajavel,
Professor and Head
Department of Mechanical Engineering.
Dr. K. Umanath,
Associate Professor,
Department of Mechanical Engineering.
Dr. S. Prabakaran,
Associate Professor,
Department of Mechanical Engineering.

REVIEWERS

MD. Abul Kalam
CEng MIMechE (UK), MSAE (US), MACS (US), MIEB (Bd), Mytribos (My)
Associate Professor,
Dept of Mechanical Engineering,
University of Malaya, Malaysia.
Mr. Sri Ram
Head – Exhaust and After Treatment Division
Ashok Leyland., Chennai.
Mr. Srinivasan J G.
Dy General Manager in Central Quality - CORE
(Centre of Reliability Excellence)
Ashok Leyland., Chennai.
Ms. Nalini
Chief Manager,
National Small Industries Corporation Limited (A Govt. of India Enterprise),
Technical Service Centre,
Ekkaduthangal, Chennai.

COMMUNICATION DETAILS

Coordinator – ICTAME 2018,
Department of Mechanical Engineering,
AMET, East Coast Road,
Kanathur, Chennai 603112, India
Website: www.ictame.com, ametuniv.ac.in/ictame
Emails: ictame2018@gmail.com, ictame@ametuniv.ac.in

P124-Coefficient Bounds for A New Subclass of Bi-Univalent Functions Defined By Q-Fractional Derivative Operator

G. Saravanan[1], Muthunagai. K[1]

[1]School of Advanced Sciences, VIT University, Chennai - 600 127, Tamil Nadu, India.

Abstract

In this article, two new sub classes of bi-univalent functions have been introduced. The classes have been defined, using Symmetric Q-Derivative Operator and the bounds for functions belonging to these classes have been obtained by using Faber Polynomial Techniques. We also have seen our results reducing to the results discussed in various other articles and visualized the nature of certain coefficient bounds for classes defined.

Keywords: Bi-univalent ; Faber Polynomials ; Symmetric Q-Derivative Operator.

Corresponding Author: G. Saravanan
E-mail address: gsaran825@yahoo.com
Tel.No: +91-7418700469

Conference collection

Recent Developments in Mathematical Analysis and Computing

Proceedings of the National Conference on Mathematical Analysis and Computing (NCMAC 2018)

Chennai, India
13–14 December 2018

Editors
S. Yugesh, Om P. Ahuja, G. Kalpana and V. Vembarasan

AIP | Conference Proceedings

Coefficient bounds for a new subclass of bi-univalent functions defined by q-fractional derivative operator

G. Saravanan, and K. Muthunagai

Coefficient bounds for a new subclass of Bi-univalent functions defined by q-fractional derivative operator

G. Saravanan[1,2,a)] and K. Muthunagai[3,b)]

[1]*Research Scholar, School of Advanced Sciences, VIT University, Chennai - 600 127, Tamil Nadu, India.*
[2]*Present Address, Department of Mathematics , Patrician College of Arts and Science, Adyar, Chennai-600020, Tamil Nadu, India.*
[3]*School of Advanced Sciences, VIT University, Chennai - 600 127, Tamil Nadu, India.*

[a)]Corresponding author: gsaran825@yahoo.com
[b)]muthunagai@vit.ac.in

Abstract. In this article, two new sub classes of bi-univalent functions have been introduced. The classes have been defined, using Symmetric Q-Derivative Operator and the bounds for functions belonging to these classes have been obtained by using Faber Polynomial Techniques.

INTRODUCTION

The class of all normalized functions of the form

$$f(z) = z + \sum_{n=2}^{\infty} a_n z^n \tag{1}$$

which are analytic in the open unit disk U be denoted by A. Denote by S, the subclass of A, of all univalent functions in the open unit disk U.

A function $f(z) \in S$ is said to be bi-univalent in U, if its inverse has an analytic continuation to $|w| < 1$. The class of all bi-univalent functions is denoted by Σ.

The concept of bi-univalent functions was introduced by Lewin [1] who proved that if $f(z)$ is bi-univalent, then $|a_2| < 1.51$. This result has been improved to $|a_2| \leq \sqrt{2}$ by Brannan and Clunie [2]. There is an extensive study on the estimates of the initial coefficients of bi-univalent functions (see [3, 4, 5, 6, 7, 8, 9, 10]).

Koebe's one-quarter theorem asserts that the image of the unit disk U under every univalent function $f \in S$ contains a disk of radius $\frac{1}{4}$. Thus every function $f \in S$ has an inverse f^{-1}, satisfying $f^{-1}(f(z)) = z, (z \in U)$ and $f(f^{-1}(w)) = w, \left(| w |< r_0(f); r_0(f) \geq \frac{1}{4}\right)$, where

$$f^{-1}(w) = w - a_2 w^2 + (2a_2^2 - a_3)w^3 - (5a_2^3 - 5a_2 a_3 + a_4)w^4 + \cdots \tag{2}$$

For $0 \leq \alpha < 1$, let $S^*(\alpha)$ [11] and $C(\alpha)$ [11] denote the subclasses of S consisting of starlike and convex functions of order α in U. Analytically these classes are characterized by the inequalities

$$f \in S^*(\alpha) \Leftrightarrow Re\left(\frac{zf'(z)}{f(z)}\right) > \alpha$$

B. Rushi Kumar
R. Sivaraj
B. S. R. V. Prasad
M. Nalliah
A. Subramanyam Reddy
Editors

Applied Mathematics and Scientific Computing

International Conference on
Advances in Mathematical Sciences,
Vellore, India, December 2017 -
Volume II

Birkhäuser

B. Rushi Kumar • R. Sivaraj • B. S. R. V. Prasad
M. Nalliah • A. Subramanyam Reddy

Editors

Applied Mathematics and Scientific Computing

International Conference on Advances in
Mathematical Sciences, Vellore, India,
December 2017 - Volume II

Birkhäuser

Editors
B. Rushi Kumar
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

R. Sivaraj
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

B. S. R. V. Prasad
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

M. Nalliah
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

A. Subramanyam Reddy
Department of Mathematics
School of Advanced Sciences
Vellore Institute of Technology
Vellore, Tamil Nadu, India

Contents

Estimation of Upper Bounds for Initial Coefficients and Fekete-Szegö Inequality for a Subclass of Analytic Bi-univalent Functions

G. Saravanan and K. Muthunagai

Abstract In this article we have introduced a class $\tilde{\mathscr{R}}_\Sigma(\eta, q, \varsigma)$, $\eta \in \mathbb{C} - \{0\}$ of bi-univalent functions defined by symmetric q-derivative operator. We have estimated the upper bounds for the initial coefficients and Fekete- Szegö inequality by making use of Chebyshev polynomials.

Keywords Bi-univalent · Chebyshev polynomials · Symmetric q-derivative operator

1 Introduction

Let A be the class of all normalized functions of the form

$$f(z) = z + \sum_{n=2}^{\infty} a_n z^n \tag{1}$$

which are analytic in the unit disk U. A holomorphic, injective function on U is said to be univalent on U. Let S, the subclass of A, be the class of all univalent functions on U.

G. Saravanan (✉)
School of Advanced Sciences, VIT Chennai, Chennai, Tamil Nadu, India

Department of Mathematics, Patrician College of Arts and Science, Chennai, Tamil Nadu, India
e-mail: saravanang.2015@vit.ac.in

K. Muthunagai
School of Advanced Sciences, VIT Chennai, Chennai, Tamil Nadu, India
e-mail: muthunagai@vit.ac.in