Coefficient Bounds For Certain Subclasses of Analytic and Bi-Univalent Functions *

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Abstract

In this paper, we introduce and investigate an interesting subclass of analytic and bi-univalent functions in the open unit disk $\mathbb{U}$. Furthermore, we find upper bounds for the second and third coefficients for functions in this subclass. The results presented in this paper would generalize and improve some recent works.

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1   Introduction

Let $\mathcal{A}$ be a class of 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 $\mathbb{U} = \{z \in \mathbb{C} : |z| < 1\}$. Also $\mathcal{S}$ denote the class of functions $f \in \mathcal{A}$ which are univalent in $\mathbb{U}$.