

## 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.

**MSC:** Primary: 30C45; Secondary: 30C50.

**keywords:** Analytic functions, Bi-univalent functions, Koebe one-quarter theorem, Coefficient estimates.

## 1 Introduction

Let  $\mathcal{A}$  be a class of functions of the form

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

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  $\mathbb{U}$ .

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