

A new modification of Durrmeyer type mixed hybrid operators

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ABSTRACT.

In 2008 V. Miheşan constructed a general class of linear positive operators generalizing the Szász operators. In this article, a Durrmeyer variant of these operators is introduced which is a method to approximate the Lebesgue integrable functions. First, we derive some indispensable auxiliary results in the second section. We present a quantitative Voronovskaja type theorem, local approximation theorem by means of second order modulus of continuity and weighted approximation for these operators. The rate of convergence for differential functions whose derivatives are of bounded variation is also obtained.

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