On Bernstein-type operators preserving derivatives

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As it is well known, Bernstein polynomials were introduced by S. Bernstein in 1912 to provide a constructive proof of the Weierstrass approximation theorem, establishing that every continuous function defined on [0, 1] can be uniformly approximated by Bernstein polynomials.

In this work we study Bernstein-type operators that preserves the derivatives in the sense that the operator applied to the derivative of a function can be expressed as the derivative of the operator applied to the original function as was studied in [2], related to the operators defined in [1].

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References

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