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Editors  
Applied Mathematics and Computation

Dear Editors,

I am pleased to submit the original research article “Compensated de Casteljau algorithm in  $K$  times the working precision” for consideration for publication in Applied Mathematics and Computation. This manuscript builds on prior work of Jiang et al in evaluating a polynomial in Bernstein form with greater accuracy. It follows Graillat et al in producing a method for evaluation that produces results as accurate as if performed in  $K$  times the working precision, then rounded back into the working precision.

In this manuscript, error-free transformations for the sum and product are used to track the **exact** round-off error throughout the de Casteljau algorithm. At each stage of computation, round-off error is passed on to first order errors, then to second order errors, and so on. After the computation has been “filtered”  $(K - 1)$  times via this process, the resulting output is as accurate as the de Casteljau algorithm performed in  $K$  times the working precision.

I believe that this manuscript is appropriate for publication by Applied Mathematics and Computation because it describes a computational method for extending the accuracy of a well-studied algorithm to arbitrarily high precision. The accompanying error analysis confirms the numerical results.

I confirm that this manuscript has not been published elsewhere and is not under consideration by another journal. All authors have approved the manuscript and agree with its submission to Applied Mathematics and Computation.

Thank you for your consideration!

Sincerely,

*Danny J. Hermes*