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A numerical technique based on collocation method for solving modified Kawahara equation

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Highlights

- The solitary-wave solutions of the modified Kawahara equation is obtained by using collocation method based on septic B-spline functions.
- The method successfully models the motion and interaction of the solitary waves and evolution of solitons.
- Applied method can a reliable method for obtaining the numerical solutions of similar type non-linear equations.
- Numerical experiments demonstrate accuracy and robustness of the method for solving other nonlinear problems.

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