Approximate Solution of Volterra-Fredholm Integral Equation with Hilbert Kernel

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Abstract

In this work, We use numerical technique to reduce the Volterra- Fredholm integral equation to a linear system of Fredholm integral equations of the second kind and we apply the product Nystrom method to solve this system of integral equations to get the approximate solution of Volterra-Fredholm integral equation. The results are compared with the exact solution of the integral equation.

References

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Index Terms

Computer Science

Applied Mathematics

Keywords

Volterra-Fredholm integral equation  Hilbert kernel  product Nystrom method
Numerical treatment.