Solving Poisson Equation by Genetic Algorithms

Abstract

This paper deals with a method for solving Poisson Equation (PE) based on genetic algorithms and grammatical evolution. The method forms generations of solutions expressed in an analytical form. Several examples of PE are tested and in most cases the exact solution is recovered. But, when the solution cannot be expressed in an analytical form, our method produces a satisfactory solution with a good level of accuracy.

References

- Salzner, Y., Otto, P., and Ladik, J. 1990 Numerical solution of a partial differential equation system describing chemical kinetics and diffusion in a cell with the aid of
Solving Poisson Equation by Genetic Algorithms


Index Terms

Computer Science
Applied Sciences

Keywords

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