Apply Neural Computation to Ground Waves Caused by High-Speed Trains

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ABSTRACT

In this paper, finite elemental problems are transmitted into a quadratic programming by using the minimum potential energy theorem. A method, which can be applied to the quadratic programming, is that an optimization problem can be mapped into a dynamic circuit by using proper neural network, and it can converge to the global minimum by using genetic algorithm within circuit times.

Keywords: Neural Computation; Genetic Algorithm; Finite Element; Ground Waves