Abstract

Optimization becomes a very important methodology appear in scientific life. It can be applied in many different application fields, like telecommunications, data mining, design, combinatorial optimization, power systems and Electronic circuits. Development of electronic circuit is a complex process that needs some simplification that may be difficult to be done using traditional way. In this paper a hybrid rough particle swarm optimization (HRSO) algorithm is proposed for electronic circuit simplification. The (HRSO) is applied to simplify circuit by reducing the components of circuit to try to find optimal value of circuit components.
- Doerr; B., &quot;Evolutionary Algorithms and Dynamic Programming&quot;, pp. 2-34, 2013.
- Venugopal; K., et. al., &quot;Soft Computing for Data Mining Application&quot;, SCI 190, p. 16, 2009.
- Chu. Y., et. al., &quot;Study on Fault Diagnosis of Circuit-breaker Based on Rough-Set Theory&quot;, TELKOMNIKA, Vol. 11, No. 1, pp. 296-301, 2013.
- Venugopal; K., et. al., &quot;Soft Computing for Data Mining Application&quot;, SCI 190, p. 16, 2009.
- Salama; A., &quot;Bitopological rough approximations with medical applications&quot;, J. King Saud University (Science) 22, pp. 177–183, 2010.
- Yan; C., et. al., &quot;Study on Fault Diagnosis of Circuit-breaker Based on Rough-Set Theory&quot;, TELKOMNIKA, Vol. 11, No. 1, pp. 296-301, 2013.
- Toushmalani ; R., &quot;Gravity inversion of a fault by Particle swarm optimization (PSO)&quot;, Toushmalani Springer Plus, pp. 1-7, 2013.
- Pratiwi. L., et. al., &quot;Improving Ant Swarm Optimization with Embedded Vaccination

Index Terms

Computer Science
Algorithms

Keywords
Rough set particle swarm optimization and electronic circuits.