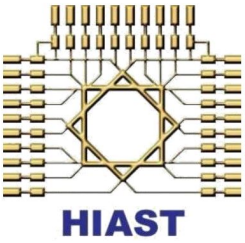
Syrian Arab Republic
Higher Institute for Applied Sciences and Technology
Informatics Department
Fourth Year




# Using Genetic Algorithms to Find Approximations for the Minimum Vertex Cover Problem

Keywords: genetic algorithms, NP-complete, combinatorial optimization, non-deterministic algorithms, approximation algorithms, minimum vertex cover.

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**Abstract**

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# Contents

# 1 Introduction

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# Unnumbered Section

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# References


[1] P. A. M. Dirac. *The Principles of Quantum Mechanics*. International series of monographs on physics. Clarendon Press, 1981.

[2] A. Einstein. Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]. *Annalen der Physik*, 322(10):891–921, 1905.

[3] D. E. Knuth. *The Art of Computer Programming*. Four volumes. Addison-Wesley, 1968. Seven volumes planned.