Abstract

Let G be an IFG. Then a set \( D \) is said to be a strong (weak) dominating set if every vertex is strongly (weakly) dominated by some vertex in \( D \). We denote the strong (weak) intuitionistic fuzzy dominating set by \( \text{sid-set} \) (\( \text{wid-set} \)). The minimum vertex cardinality over all the \( \text{sid-set} \) (\( \text{wid-set} \)) is called the strong (weak) dominating number of an IFG and is denoted by \( \gamma \).

In this paper, we introduce the strong (weak) domination in intuitionistic fuzzy graphs and obtain some bounds in IFG.

References


Index Terms

Computer Science

Fuzzy Systems

Keywords

Intuitionistic fuzzy graph, strong (weak) domination, strong (weak) domination number, dominating critical