

The well know constraint satisfaction problem (CSP) can be generalized to a class of optimization problems - VCSP. In 2012, D. A. Cohen, M. C. Cooper, P. Creed, P. G. Jeavons and S. Živný proved that weighted clones and weighted relational clones play the same role for the VCSP as do clones and relational clones for the CSP. However the structure of weighted clones remains unknown even for two element domain. This thesis presents a more detailed proof of the result mentioned above and then it investigates the structure of weighted clones. For Boolean domain, we present a complete classification of weighted clones over all seven minimal clones.