

## NECKS OF SINGLE VALUED NEUTROSOPHIC AUTOMATA

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**Abstract:** We define necks, directable, trap, trap-directable, and reversible state of single-valued neutrosophic automaton. Furthermore, the features of necks are described, as well as new structural characterizations of a directable SVNA. We show that the SVNA set of necks is the smallest subautomaton and that it is also a reversible SVNA. Finally, we show that an SVNA is strongly directable(SD) if and if it is strongly connected(SC) and directable. A directable SVNA is a trap-directable(TD) single valued neutrosophic automaton that is a distension of a strongly directable single valued neutrosophic automaton.

**Keywords and Phrases:** Single Valued Neutrosophic Automaton (SVNA), Neck, Directable, Trap, Trap-directable(TD) of SVNA.

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